VISWAJYOTHI
COLLEGE OF ENGINEERING & TECHNOLOGY
Approved by AICTE New Delhi & Affiliated to APJ Abdul Kalam Technological University

Innovation and Entrepreneurship Development Centre

(IEDC)

Viswajyothi College of Engineering and Technology

Summary Report on Activities of
Innovation And Entrepreneurship Development Centre (IEDC)

SUMMARY REPORT ON ACTIVITIES OF INNOVATION AND ENTREPRENEURSHIP DEVELOPMENT CENTRE (IEDC) IN VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY

1. Introduction

Innovation and Entrepreneurship Development is being promoted in educational institutions to develop institutional mechanisms to create entrepreneurial culture in S&T academic institutions and to foster techno-entrepreneurship for generation of wealth and employment by S&T persons. IEDCs are established in academic institutions having requisite expertise and infrastructure. The Coordination committee of Innovation and Entrepreneurship Development Centre of VJCET was constituted on 20.10.2016 and activities are organized with the support of Kerala Start-up Mission. The coordination committee has representation for students and faculty members from all departments. This report gives a brief summary of activities carried out by IEDC since its inception.

2. Support From Kerala Startup Mission (KSUM)

IEDC of Viswajyothi college of Engineering and Technology is functioning with the technical and financial support of Kerala StartUp Mission. As suggested by KSUM IEDC VJCET has opened a savings account in South Indian Bank Vazhakulam. The IEDC unit was recognized by Kerala Startup mission on 8.12.2016 and a financial grant of Rs. 2 lakhs was received and the amount was transferred to IEDC account. This amount is being used for conducting technical talks, interaction with innovators, Industrial visits and prototype product development activities.

3. Orientation Programmes Organized

3.1 A one day orientation programme on Entrepreneurship for the benefit of second year students on 12th November 2016 in association with   Ourea Training Hub, Kochi. 60 students participated in the programme.

3.2 Organised an orientation program on IEDC for first year students of 2018 batch on 26.04.2019.

3.3 Varthapathi , IEDC orientation programme for S2 Students on 30.04.2019.

3.4 IEDC orientation programme for first years of   IT Branch on 01.08.2019.

3.5 Address by Dr K C Chandrasekharan Nair to Management   EC members and faculty members 12.10.2018.

3.6 Organised a talk on 'Entrepreneurship for Engineers' by Dr. K C Chandrasekharan Nair on 9.11.2018.

3.7 IEDC orientation programme for first years of EEE Branch on 01.08.2019.

3.8 IEDC orientation programme for first years of ECE Branch on 01.08.2019 .

3.9   IEDC orientation programme for first years of   ME Branch on 01.08.2019.

3.10   **I**EDC orientation programme for first years of   CE Branch on 02.08.2019.

3.11   **I**EDC orientation programme for first years of CSE Branch on 01.08.2019.

3.12 Idea Discussion meet with students of all department   chaired   by Shri K C Chandrasekharan Nair on 30.08.2019.

3.13 Discussion meet with   faculty members   by Shri K C Chandrasekharan Nair on 31.08.2019 .

3.13 Orientation programme for   IEDC members of VJCET   by Dr K K Rajan   on 11.10.2019.

4. Workshops Conducted

IEDC of VJCET has conducted following workshops in the last three years.

4.1 One day workshop on digital manufacturing was organized on March 30 th 2017 in association with M/s Forier Incubation Technologies pvt Ltd. Cochin. The workshop

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was attended by   60 students   from different disciplines. A 3D printer was available for display and demonstration to the students.

4.2   Disha 2018, a Women's Entrepreneurship Development Programme was organized in Association with Prayaana Labs, Kochi on 28.02.2018
.

4.3   Conducted workshop - Haptic Interface Robot   in association with   Robotic Club,VJCET 03.05.2019

4.4   Robone Workshop Series " Basics of bluetooth controlled robot" on 26.04.2019. Talk and interactive session handled by expert team from eYogi, Zappyhire and Pytenlab , Info park Cochin.

5.   Workshops Attended

5.1 Faculty members and students attended 2 day workshop at St Joseph College Palai

5.2 A Faculty member attended workshop - "Mentoring campus startups" at Trinity College Thiruvananthapuram 07.12.2018

5.3   Four students form VJCET Attended Huddle   Kerala at Kovalam Trivandrum 28.10.2019

5.4   Seven students attended   Mobile application workshop conducted by KSUM at MBITS, Nellimattom, Kothamangalam on   on 16th and 17th of October, 2019

6.   Talks By Entrepreneurs/Experts

6.1   Technical Talk on the Topic "Challenges in the evolution of an Industry", by Shri. A Dineshkumar, MD, CT control technology, Bangalore.

6.2 Technical talk "Technology Development : Process & Protocols", By A Nandakumar, BARC, Mysore.

6.3 Technical Talk on "Solar PV: A sunrise of opportunity for Engineers" , By Shri. G Krishnakumar, Senior Faculty, Evergreen technologies Pvt Ltd, Kochi.

![Viswajyothi College of Engineering & Technology logo and header]

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7.   TRAINING PROGRAMMES ATTENDED

Two faculty members of VJCET are undergoing a Department of Science and Technology sponsored faculty development programme on Entrepreneurship   sponsored by NSTEDB.

8.   Participation In IEDC Summits

8.1   IEDC Summit 2017

IEDC summit 2017 held at Adlux International convention center, Angamali on August 19, 2017.Two faculty members and 15 students from VJCET participated in the IEDC Summit 2017 which was held at Adlux International Convention Center, Angamali on August 19, 2017. The Summit started at 9.30 AM. There were two sets of panel discussions to learn from two levels of entrepreneurs, one who have succeeded from Kerala and established their business across the globe and the other a group of young generation aspiring entrepreneurs with innovative enterprises. Main speakers were Varun Chandran of Corporate 360, DentCare Dental Labs founder John Kuriakose, James Joseph of Jackfruit 365 and Chaipaani founder Shruti Chaturvedi. They shared their stories and insights of the industry at a panel discussion on 'Identify the problem, Explore the opportunity, build your Enterprise/Startup'. The event had over 2000 participants from 200 Innovation Entrepreneurship Development Centers across Kerala.

Students discussed with various young entrepreneurs and were able to understand the methods of gaining funds for startups and the challenges involved in new startups.

8.2   IEDC Summit 2018

IEDC SUMMIT 2018   was India's Largest Summit for Aspiring Entrepreneurs. Kerala Startup Mission Conduct 3rd "IEDC Summit 2018" hosted by Amal Jyothi College of Engineering, Kanjirappally. Over 214 IEDC Branches from 214 Colleges Across 14 Districts of Kerala Fetching 3000+ Students Participated in the event. One of the faculty IEDC coordinator Shri Basil baby attended Nodal officers meet at Amaljyothi College of Engg., Kanjirappally on 02.11.2019. Twenty three   Students,   four faculty members, nodal officer and two management representatives   attended the summit. Students and faculty members attended various events in the summit such as workshops, talks and exhibitions. The summit was very much motivating to students to become young entrepreneurs.

8.3 IEDC   Summit 2019

IEDC   Summit 2019 Conducted on Saturday 19.10.2019 at Sahrdaya college of Engineering and technology Kodakara. Kerala Start-up Mission, the Nodal agency of Government of Kerala organized   IEDC Summit 2019, Asia's largest student Entrepreneurship Summit where the students got an opportunity to experience the technological diversities and advancements through a series of technology track events, brainstorming sessions, interactive community meet ups and product exhibitions. IEDC Summit 2019 was conducted in Sahrdaya College of Engineering and Technology, Kodakara, Thrissur. Sixteen students, one faculty member, Nodal officer   IEDC and the Management coordinator of VJCET, V-BIC attended this Asia's largest summit for aspiring entrepreneurs. This report gives the details of IEDC summit 2019 and highlights benefits gained by the participants. 19 delegates attended the summit from VJCET. This summit was very useful to the students because students got an opportunity to experience the technological diversities and advancements through a series of technology track events, brainstorming sessions, interactive community meet ups and product exhibitions. The summit was a real inspiration

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to all the participants. EDC summit 2019 was well organised by Kerala StartUp Mission. It was an opportunity for students and aspiring entrepreneurs to listen to eminent personalities and established entrepreneurs. VJCET had very good participation and involvement in the summit. The knowledge and experience gained by VJCET delegates should be effectively utilised to develop a start-up friendly ecosystem in the college.

9. Participation In Other KSUM Programmes

Six students and four faculty members participated in the Yes 3D summit held at Hotel Le Meridian, Kochi. A faculty member from VJCET Participated in Mini Fab lab and the Way forward workshop held at Makers village Kalamassery. A One day seminar on Millennium Alliance held at Cochin was attended by the nodal officer IEDC. VJCET students team won the prize of "Hero of Bootcamp " in Ernakulam district as part of Startup India Kerala Yatra on 12.11.2018.

10. VJCET Idea Fest

IEDC of VJCET organizes an idea fest every year.

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10.1   VJCET Idea Fest 2018

IEDC of VJCET organized   Idea fest during the first week of October 2018. This event will focus exclusively on innovative ideas from students of Viswajyothi College and enable students to effectively participate in the state level idea fest competitions held by Kerala Startup Mission. Students can participate in a team maximum four numbers or as individuals. Each selected idea will get an initial fund of Rs 5000/-   for prototype development. Students should prepare a one page write up of the proposed idea and submit it to the IEDC department coordinators. The last date for submission of ideas is Friday 28th September 2018. Forty teams participated in the Idea fest 2018. One   idea was selected from each department for financial support of Rs, 5000 for prototype development. The Ideafest 2018 was a real motivation to students.

10.2   VJCET Idea Fest 2019

Based on the excellent response from   students in 2018 idea fest 2019 was organized in the period August-October 2019. Seventy one teams participated in Idea fest-2019. Prior to the final round of VJCET Idea Fest-2019, a discussion meet is organised on Friday, 30.08.2019   for refining the innovative business ideas of students and faculty members. Faculty members and students of each department of VJCET are required to submit their innovative technology based idea for developing into a prototype or product before 26.08.2019. The idea should have marketing feasibility and the potential to develop to a profit making business in the long run. Dr. K. C. Chandrasekharan Nair, co-founder of Technopark Trivandrum, former CFO,Techno park and Secretary & Registrar, Technopark TBI chaired the discussion meet and looked into the feasibility to convert an Idea into a start-up venture. In the discussion meet , separate sessions are   arranged   for different departments as follows. Venue of the meeting was the VJCET conference room.

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Idea evaluation was done in Each of the six departments. An expert committee headed by the Head of the department has carried out the evaluation. IEDC department coordinator and technical experts and domain experts were members of the evaluation team. One idea from each department was selected and provided with financial support of Rs.5000/- for proto type development. List of winners are given below.

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Innovation and Entrepreneurship Development Centre
VJCET Idea Fest-2019

Ref: VJCET/IEDC/KKR/2019 / 31

Dt. 13.11.2019

Innovation and Entrepreneurship Development Centre (IEDC) in association with Viswajyothi Business Incubation Centre (V-BIC) of Viswajyothi College of Engineering and Technology had organized Idea Fest-2019 during the last week of October 2019. This event had focused exclusively on innovative technology based idea of students for developing a prototype or product. Following teams are selected as winners of Idea Fest-2019. IEDC will provide them financial support upto Rs.5000/- for prototype development.

Sl. No.	Title of Idea	Team Members	Class
1.	Beyond Connect & Learn (A learning platform to link Academic Community)	Rahul Vinod Amal Shyjo	S5 IT
2.	Automated Attendance Registering System (AARIS)	Kevin Mathew George, Philip Thomas Anandh H Paul Stanly	S5 EEE B
3.	Amphibious Cage (Flood Shelter For Live Stock)	Abhinand S, Ajwin Jose Francis, Charles George, Rahul Raj	S7 CEB
4.	Agrobuy App (IT based marketing of agricultural products)	Thomas James	S7CSA
5.	Stroke Rehab & Exercising Glove	Jephin Baby Vishnu M Amal Chandran	S7 ECB
6.	Portable Nutmeg Separator	Jipil P Chettoor Eldhose Raju Albin Paul Harikrishnan A S	S7 ME B

Dr. K.K.Rajan,
Nodal officer , IEDC ,
Viswajyothi College of Engineering and Technology,
Vazhakulam, Muavattupuzha,

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11.   KSUM Idea Fest

11.1   KSUM Idea fest 2018

Kerala Start-up mission had organized the Idea Fest 2018 during the first half of 2018. This event was exclusively focused on innovative projects by students in Kerala. The application has to be submitted in two stages. The IEDC cell of VJCET has organized   an idea campaign and encouraged students to apply by filling the interest form online. 112 students from VJCET had applied for the Idea fest in the first stage. The Idea Grants Rs. 2 lakh/ idea   will be given   to selected students by KSUM for conversion of idea to prototype. 19 student groups were selected for the final presentation. The IEDC coordination committee took all efforts to train the students to present the idea effectively. Financial support was also given for the participants of Idea fest for their travel, stay and food expenditure. The result of the Idea Fest 2018 was declared and   two students from VJCET got financial support, one got lab support and three others are in the waiting list.

11.2 KSUM Idea fest 2019

For KSU idea fest 2019 there   were   63 applicants from VJCET and 8 teams were selected for the final presentation. One VJCET Team Selected for Funding Support upto Two Lakhs. The name of the project was AGR-E (AGR- E is a CNC based Farming Machine. This was one of the 18 projects selected   out of 1600 projects from all over Kerala.

12.   Viswajyothi Incubation Centre

Realising the need of entrepreneur development   the Viswajyothi   Business Incubation Centre (V-BIC) was launched in VJCET on 26.04.2019. Inauguration of V-BIC was carried out by Shri Eldho Abraham honourable MLA Muvattupuzha. Dr Saji Gopinath delivered the keynote address. In the business incubation centre, startup   companies of students, faculty members,   alumnis and technically and professionally qualified youngsters are functioning for business incubation. The VJCET V-BIC   occupies an area of 3000 square feet, with all infrastructure available for business development. As of now seven companies have started   functioning from V- BIC. In VJCET,   V-BIC   provides

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opportunities to students to become entrepreneurs and they can be job providers rather than job seekers.

12.1   Objectives

The Objective of the venture, V-BIC is to achieve a transformation of minds of the students from being job-seekers to entrepreneurs themselves and become job providers by effectively utilizing the theoretical and practical knowledge they are acquiring from the

institution. Students and faculty will be encouraged to find innovative solutions to social problems.

- ● Introduction of Entrepreneurial culture to the students, faculty and common people.
- ● Promote students and faculty to come up with commercially viable innovative products.
- ● Create student and faculty entrepreneurs.
- ● Help to create value-added jobs and services.
- ● Create effective networking for the development of technology based startups.
  Develop internationally accepted technologies.
- ● Promote small and medium industries.

12.2   Thrust Areas

Startup Hub at Viswajyothi College of Engineering and Technology Vazhakulam, Muvattupuzha, will concentrate on the following thrust areas.

- ● Agro Technology.
- ● Green Technology.
- ● Information Technology.
- ● Robotics and Automation.
- ● Artificial Intelligence.
- ● Value added Products & Services.

Automation of traditional systems through technology upgrade is the only way to uplift the rural people. Development of interdisciplinary technologies is an essential way for overall development of the common people. To realize the enthusiasm of our student community into marketable products, it was essential to scale up the IEDC to the level of an incubation centre.

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Sl.No	Name of company	Domain	Brief details of company	Company founders Name
1.	M/s Teqnocart Innovations (OPC) Pvt. Ltd	Information technology	Website design, IT servicers maintenance of websites and creation of multimedia presentations	Shri Shan Babu,
2.	M/s One Cup Beverages Pvt. Ltd.	Health Care	Manufacture and supply of quality fruit based beverages	Shri Ricky Wilson,
3.	M/s Tinos Software and Security Solutions LLP	Information technology	IT security services	Shri. Sarath G
4.	M/s Ezoro Technologies Pvt. Ltd.	Information technology	IT based marketing promotion services	Shri. Bibin Raj
5.	M/s BIMARC Engineering Services	Engineering	Architectural drawings 3D visualization and CAD services	Shri Ameer Muhammed S
6.	M/s OOOSPRONG Technologies	Information technology	Web site design improvement , advertising, web facilitating,	Shri Vishnu Prasad

12.3 Startup Companies at VJCET

A group of our students had started a firm by name "Elam Style " with the support of IEDC. Elam Style is an online retail shop which supplies apparels. The business had been shortlisted by "IDEA DAY", an entrepreneur supporting & development program of Start-up mission Kerala Government in the month of February 2018. The program was conducted at IIM Calicut. Experts analysed the business opportunity and they have suggested for scale up of the business and lined up proper agents for the same. The managing, designing, administration and marketing works are done by students of Viswajyothi College of Engineering and Technology. The V-BIC is also the beginning of a stronger industry-academia-consumer linkage where ideas can flow to and fro, through the three stakeholder groups so that everyone benefits. The industry will benefit from technological developments

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initiated by the V-BIC as well as qualified students who have an innovative mind to join their workforce. Academia will stand to gain from its constant interaction with industry, and consumers will gain from the innovations that are rolled out through the association

13.   Innovative Student Projects

IEDC VJCET has selected six inobavtibe student projects in the year   2019 for further development . They are

- ✔ AARIS –Automated Attendance Registering System
- ✔ Stroke Rehab and Exercising Glove
- ✔ Nut X - Portable Nutmeg Separator
- ✔ AGROBUY APP Your Own Market
- ✔ Beyond : Connect And Learn
- ✔ Amphibious Structure for Lifestocks

Details of the project are given in the annexure -O

14.   Students Startups

Sl.No	Name of Startup		Contact Details
1.	M/S Mj Kreatives		9947311028 mohithantonygimmy@gmail.com Department of Electronics & Communications Engineering Fourth year
2.	M/S Volta Innovations	Shri Basil Eldhose	7034415204 basileldhose618@gmail.com Department of Electrical and Electronics & Engineering Second year

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3.	M/S Bellagio Digital Store	Shri Bennet Joy	9895954971 bennetjoy03@gmail.com Department of Information Technology First year
4.	M/S Beyond	Shri Amal Shyjo	*amalshyjo@gmail.com* Department of Electronics & Communications Engineering Third year
5.	M/S LET Innovations	Shri Jins Jolly	6238843310 jincekallarackan@gmail.com Department of Electronics & Communications Engineering Fourth Year
6.	M/S Wellctron	Shri Biju Narayanan	9495337268 bijukn1970@gmail.com Department of Electronics & Communications Engineering Parent
7.	M/s Tromac Solutions	Tony Chacko	8138916139 hellodude235@gmail.com Department of Mechanical Engineering
8.	M/s ACCREDIT360	Andrews Jose	9895987155 andrewsjoz@gmail.com Department of Computer Science and Engineering

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15.   IEDC Activity Hub

IEDC VJCET has updated the IEDC activity hub created by KSUM. Important and basic five information about our IEDC   such as   Team, Infrastructure, Finance and Partnership is completed   and our profile score is 100% . Updated details about 470 IEDC members and created   teams.   Assigned   members to teams and then updated their achievements. Updated the details 1with 2 events   already conducted   with all details.

16.   Conclusion

IEDC has been actively functioning   in VJCET   since its inception. Many orientation and motivational programmes were organised   and the message of entrepreneurship development has well penetrated to students.   IEDC is keen in providing support to the students,   conversion of their idea into prototype and for further scaling up.

The complete List of activities carried out and milestones achieved by IEDC are enclosed in Annexure-1. Annexure 2- 10   gives the separate   reports/write ups of major activities . The details of activities in the year 2019   is uploaded in KSUM IEDC activity hub and Accreditation Platform https://iedc.startupmission.in/#/event.

The amount received from KSUM so far is Rs.3,60,700. The amount in bank earned an interest of Rs.17,561.00. Out of this amount Rs 3,56,100.76/- had been utilized as on 27.01.2020. The balance amount available in the account is only Rs 22,160/-.The KSUM financial support was effectively used for entrepreneurship development activities in VJCET. In order   to   continue the activities of IEDC at VJCET   next instalment of financial support is requested from KSUM.

Viswajyothi College of Engineering and Technology
Innovation and Entrepreneurship Development Centre
List of Activities and Achievements Till Date

Sl.No	Description of Activity/Milestone	Date
1.	Formation of IEDC Coordination Committee at VJCET	20.10.2016
2.	Workshop on Orientation to Entrepreneurship in association with Ourea Training Hub, Kochi.	12.11.2016
3.	Communication received regarding sanction of grant from KSUM	09.12.2016
4.	Two faculty members undergone training on entrepreneurship sponsored by NSTEDB	13.12.2016
5.	Application for new GEN IEDC submitted to Entrepreneurship Development Institute of India	12.01.2017
6.	One day seminar on Millennium Alliance attended by Nodal, officer	22.02.2017
7.	Workshop on Digital Manufacturing organized in association with M/s Fourier Incubation Technologies pvt Ltd. Cochin	30.04.2017
8.	IEDC Coordination Committee Reconstituted through an Office Order.	28.07.2017
9.	Participated in the IEDC Summit 2017 held at Adlux International Convention Center, Angamaly	25.08.2017
10.	Technical Talk on the Topic "Challenges in the evolution of an Industry", by Shri. A Dineshkumar, MD, CT Control Technology, Bangalore.	29.08.2017
11.	Nodal officers and members Participated in the Yes 3D summit held at Le Meridian, Kochi	12.09.2017
12.	Participated Mini Fablab and the Way forward event	18.09.2017
13.	Technical talk on "Technology Development : Process & Protocols", By A Nandakumar, BARC, Mysore.	09.10.2017
14.	Faculty members attended 2 day workshop at St Joseph College Palai	
15.	Disha 2018, Women's Entrepreneurship Development Programme in Association with Prayaana Labs, Kochi	28.02.2018
16.	Technical Talk on "Solar PV: A sunrise of opportunity for Engineers" , By Shri.	01.03.2018

	G Krishnakumar, Senior Faculty, Evergreen Technologies Pvt Ltd, Kochi.	
17.	Kerala startup mission Idea Fest 2018 announcement in VJCET	01.03.2018
18.	One Student from VJCET started his startup Business Elamstyle	10.04.2018
19.	IEDC membership campaign conducted and office bearers were selected , and the coordination committee reorganized.	05.09.2018
20.	VJCET idea fest organized in October 2018	05.09.2018
21.	IEDC of VJCET is successful in winning grants and supports in the Kerala startup mission Idea fest 2018	06.09.2018
22.	Completed department level review of Ideas a s part of VJCET Idea fest	30.09.2018
23.	Address by Dr K C Chandrasekharan Nair to Management EC members and faculty members	12.10.2018
24.	Completed institutional level review of selected Ideas as part of VJCET Ideafest	02.11.2018
25.	IEDC coordinator attended Nodal officers meet at Amaljyothi College of Engg. , Kanjirappilly	02.11.2018
Sl.No	**Description of Activity/Milestone**	**Date**
26.	Faculty members and students attended KSUM IEDC Summit 2018 at Amaljyothi College of Engg. , Kanjirappilly	03.11.2018
27.	Organised a talk on 'Entrepreneurship for Engineers' by Dr. KC Chandrasekharan Nair	9.11.2018
28.	VJCET students won the price of " Hero of Bootcamp" in Ernakulam district a s a part of Startup India Kerala Yatra	12.11.2018
29.	Faculty member of VJCET attended workshop - "Mentoring campus startups" at Trinity College Thiruvanathapuram	7.12.2018
30.	Four student teams from VJCET was selected and participated in Innovation programme by APJAK KTU and KSCSTE	17.02.2019
31.	Forty three students applied as participants for KSUM Idea Fest 2019	10.03.2019
32.	Conducted an Expert Talk and interactive session. Talk and interactive session handled by expert team from eYogi, Zappyhire and Pytenlab , Info park Cochin.	08.04.2019
33.	Conducted workshop - Introduction to Robotics in association with Robotic Club,VJCET " Basics of bluetooth controlled robot" : Annexure-B	26.04.2019

34.	Inauguration of Viswajyothi Business Incubation Centre (V-BIC) by Shri Eldhose Abraham MLA and Dr Saji Gopinath CEO KSUM	26.04.2019
35.	Organized an orientation program on IEDC for first year students-Varthapathi	30.04.2019
36.	Conducted workshop - Haptic Interface Robot in association with Robotic Club,VJCET: Annexure - C	03.05.2019
37.	IEDC orientation programme for first years of EEE Branch	01.08.2019
38.	IEDC orientation programme for first years of ECE Branch	01.08.2019
39.	IEDC orientation programme for first years of CE Branch	02.08.2019
40.	IEDC orientation programme for first years of MEBranch	01.08.2019
41.	IEDC orientation programme for first years of IT Branch	01.08.2019
42.	IEDC orientation programme for first years of CSE Branch	01.08.2019
43.	Idea Discussion meet with students of all department chaired by Shri K C Chandrasekharan Nair	30.08.2019
44.	Discussion meet with faculty members by Shri K C Chandrasekharan Nair	31.08.2019
45.	Selection of IEDC office bearers and reconstitution of VJCET, IEDC coordination committee : Annexure - D	05.09.2019
46.	Attended Huddle Kerala at Kovalam Trivandrun: Annexure -E	28.09.2019
47.	Organized an Orientation programme for IEDC members : Annexure -F	11.10.2019
48.	Seven students attended Mobile application workshop conducted by KSUM at MBITS Kothamangalam : Annexure-G	16.10.2019
49.	Workshop on Data Science, Mr. Abhilash Pradeep and Mrs. Merin Abraham from M/s Spectrum Kochi were the resource persons : Annexure -H	16.10.2019
50.	Attended IEDC Summit 2019 at Sahardaya college of Engineering, Kodakara Thrissur: Annexure -I	19.10.2019
51.	A VJCET team Selected for financial assistance of Rs. 2 lakhs in the Idea fest 2019 conducted by KSUM : Annexure -J	20.10.2019
52.	Workshop on exploring the potential of entrepreneurship & introduction to M/s Teqnocart : Annexure -K	15.11.2019

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53.	VJCET Idea fest 2019 process completed and winners selected : Annexure -L	30.11.2019
54.	Nodal officer Attended the the Workshop Conducted by National Cyber Safety Security Standards at ISC Kalamassery : Annexure -M	4.12.2019
55.	Two faculty members Smt Minu George and Ms. V K Vanitha Rugmoni attended India's largest design festival Kochi Design Week on Dec 12 - 14th at Bolgatty Event Centre, Kochi :Annexure -N	12.12.2019
56.	Formation of student startups	12.12.2019
57.	Selection of Innovative students projects : Annexure - O	12.12.2019
58.	Implementation of a mentoring scheme : Annexure - P	12.12.2019
59.	Updating of KSUM IEDC activity hub	12.12.2019
60.	Report on major activities of IEDC in 2019 : Annexure - Q	20.12.2019

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Annexure -B

REPORT ON "INTRODUCTION TO ROBOTICS" WORKSHOP

Conducted by

Robotics club of Mechanical Engineering

in association with IEDC, VJCET on 26ᵗʰ April 2019

Robotics is an interdisciplinary branch of engineering and science that includes mechanical engineering, electronic engineering, information engineering, computer science, and others. Robotics deals with the design, construction, operation, and use of robots, as well as computer systems for their control, sensory feedback, and information processing.

These technologies are used to develop machines that can substitute for humans and replicate human actions. Robots can be used in many situations and for lots of purposes, but

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today many are used in dangerous environments (including bomb detection and deactivation), manufacturing processes, or where humans cannot survive (e.g. in space). Robots can take on any form but some are made to resemble humans in appearance. This is said to help in the acceptance of a robot in certain replicative behaviors usually performed by people. Such robots attempt to replicate walking, lifting, speech, cognition, and basically anything a human can do. Many of today's robots are inspired by nature, contributing to the field of bio-inspired robotics.

The concept of creating machines that can operate autonomously dates back to classical times, but research into the functionality and potential uses of robots did not grow substantially until the 20th century. Throughout history, it has been frequently assumed by various scholars, inventors, engineers, and technicians that robots will one day be able to mimic human behavior and manage tasks in a human-like fashion. Today, robotics is a rapidly growing field, as technological advances continue; researching, designing, and building new robots serve various practical purposes, whether domestically, commercially, or militarily. Many robots are built to do jobs that are hazardous to people, such as defusing bombs, finding survivors in unstable ruins, and exploring mines and shipwrecks. Robotics is also used in STEM (science, technology, engineering, and mathematics) as a teaching aid. The advent of nanorobots, microscopic robots that can be injected into the human body, could revolutionize medicine and human health.

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The program started off late by 10am in the PTC seminar Hall with a formal inauguration for flagging off the Workshop series "ROBONE". The gathering was greeted with a welcome address by Mr. Rakesh Jose (Faculty Coordinator Robotics Club). Then the Director Dr. George Thanathuparabil (Director, Viswajyothi College of engineering and technology) addressed the gathering where the importance of IEDC and the business incubation centre V-BIC was mentioned. He also appreciated 3the efforts put up by IEDC to enhance and promote innovation among students.

The presidential address was delivered by Dr.Josephkunju Paul C (Principal, Viswajyothi College of engineering and technology) where he addressed about entrepreneurship and the trends that were found among the alumni of the college.

Inaugural address was then delivered by the chief guest Mr. Varghese Benny (CEO and Founder, Rabbitsquare), he shared a glimpse of his experiences in the startup journey the reason he took it and the happiness he finds in it though he have been going through struggles .Leo Cherian (CEO IEDC Viswajyothi college of engineering and technology) showed the piece of gratitude by delivering the vote of thanks in the inauguration ceremony.

The inauguration ceremony was also blessed with the presence of Dr. Pramodkumar M (Dean Academics) and Mr. Vinoj K (HOD Mechanical Engineering Dept.)

The inauguration ceremony was concluded and the workshop session was preceded on after the workshop kits had been presented by Mr. Rakesh Jose (Faculty Coordinator Robotics Club). The Morning session had a brief talk on introduction of robotics, the different development boards, basic programming exercises and hardware interfacing sessions. By noon the participants were aware of the fundamentals of robotics, its interfacing using Arduino IDE platform and Arduino UNO development board.

In the afternoon session the participants were introduced to rover assembly and the rover controlling using the development board. Then they were provided a chance to interface with the Bluetooth module to the mobile and its final touch up on the programming was administered. They then had time to interface the devices, develop it and make their rover work. By the design of the rover the students had developed a sense of understanding about

the analog, digital pins, basic arduino interfacing. Interfacing of hardware components to the board and getting desired outputs were all identified by the participants
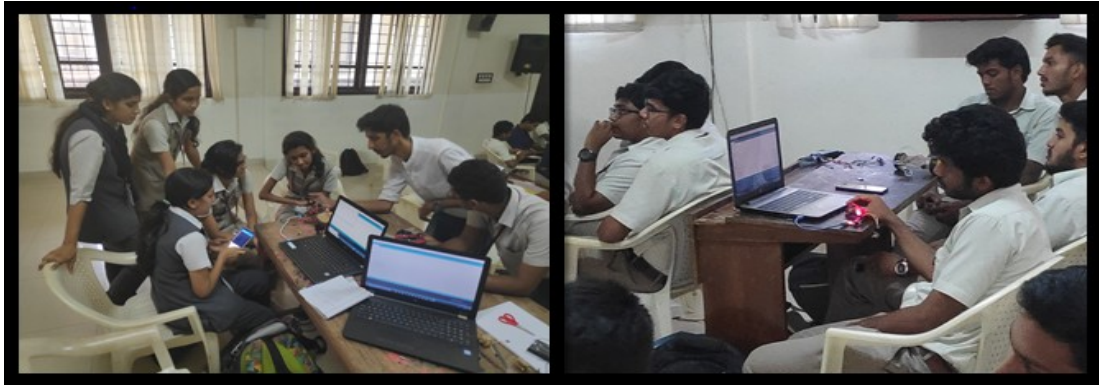
By 4pm the students were asked to leave a feedback form where the review was found to be a well planned and organised workshop, also the rated the workshop 5/5. The participants requested sessions on advanced topics like artificial intelligence to be delivered in future sessions. The session for the day was then concluded and the participants were allowed to leave by 4:15pm.

Annexure - C

REPORT ON "HAPTICS INTERFACED DEVICES"

Workshop Conducted by Robotics club of Mechanical Engineering   in association with IEDC, VJCET on 3rd MAY 2019

A haptics interface is a system that allows a human to interact with a computer through bodily sensations and movements. Haptics refers to a type of human-computer interaction technology that encompasses tactile feedback or other bodily sensations to perform actions or processes on a computing device. A haptics interface is primarily implemented and applied in virtual reality environments, where an individual can interact with virtual objects and elements.

A haptics interface relies on purpose-built sensors that send an electrical signal to the computer based on different sensory movements or interactions. Each electrical signal is interpreted by the computer to execute a process or action. In turn, the haptic interface also sends a signal to the human organ or body. For example, when playing a racing game using a haptic interface powered data glove, a user can use his or her hand to steer the car. However, when the car hits a wall or another car, the haptic interface will send a signal that will imitate the same feeling on the user's hands in the form of a vibration or rapid movement.

In order to develop cost-effective haptic interfaces, it is necessary to understand the roles played by the mechanical, sensory, motor, and cognitive subsystems of the human haptic system. The mechanical structure of the human hand consists of an intricate arrangement of 19 bones, connected by almost as many frictionless joints and covered by soft tissue and skin. Altogether, the bones are attached to about 20 intrinsic and extrinsic muscles through numerous tendons, which serve to activate 22 degrees of freedom (DOF) of the hand.

The sensory system includes large numbers of various classes of receptors and nerve endings in the skin, joints, tendons, and muscles. Appropriate mechanical, thermal, and chemical stimuli activate these receptors, causing them to transmit electrical impulses via the afferent neural network to the central nervous system (of which the brain forms a part), which in turn sends commands through the efferent neurons to the muscles for desired motor action.

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The Workshop started off with a greeting by Mr. Rakesh Jose (Faculty Coordinator Robotics Club) for the participants and the resource of the day Mr. Akhil Rajan (Software Engineer, Digital Innovation, IBS software services).The Morning session had a brief talk on recent trends in the industry, the projects the resource was working on, and about the various key terms like Machine Learning(ML), Deep Learning (DL),Natural Language Processing (NLP)., etc. used in the day to day life in industry.

This was followed by a session on developing an app on MIT App Developer to recognise Speech (HAPTICS) and enact on the rover developed in the last session. Once the app was developed it was interfaced and tested. The participants were happy with the results they had in the session.

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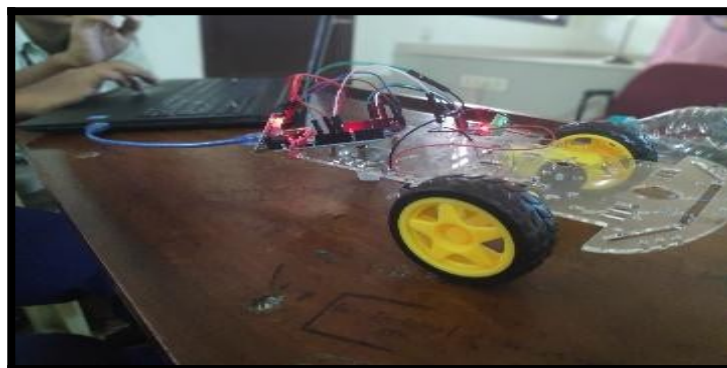
It was followed by a session on the Dialogue flow platform and the ways to create a Chatbot. The participants were then asked to develop a chat bot for various applications at that instance. The morning session was then concluded after the interfacing and chatbot were developed.

In the afternoon session the participants were introduced to some modules in arduino. Then they were provided a chance to experience peer learning or continuous learning from the internet as done in the industry. Once this session was done, they were introduced to s idea development or brainstorming session where they discuss the topic, technical details and other related details for a product development in a simulated environment.

These ideas were then evaluated by a panel consisting Mr. Rakesh Jose (Faculty Coordinator Robotics Club), Mr. Akhil Rajan (Software Engineer, Digital Innovation, IBS software services, and Mr. Anoop (Viswajyothi college alumni). The projects were identified and the necessary assistance for its development was assured by the resource person. The resource person also dropped in an industry problem statement to develop a human following robot and urged the students to develop a team to develop it.

Then the participants were awarded the certificate for participation and the workshop series was concluded. The feedback was reviewed and found to be a good workshop, also the rated the workshop 4/5.

These participants found the session fully packed up and suggested breaking up the session into different modules. A Group photo of the whole team was taken and the participants then were allowed to leave with the kit for the development of projects.

Innovation and Entrepreneurship Development Centre (IEDC)
Viswajyothi College of Engineering And Technology
Vazhakulam, Muvattupuzha

Ref: VJCET/IEDC/2019/05   Dt.
05.09.2019

Innovation and Entrepreneurship Development Centre (IEDC) coordination committee of Viswajyothi College of Engineering and Technology is reconstituted with immediate effect as follows.

Sl.No	Name	Position	IEDC Designation
1.	Dr. K K Rajan,	Prof. EEE and Dean IIIC	Nodal officer, IEDC
2.	Mr. Robin Augustine	Asst. Professor , S & H	Assistant Nodal officer, IEDC
3.	Dr. Sheela V K	Asst. Professor, IT	IT Dept. Coordinator,IEDC
4.	Mr. Jomu M George	Asst. Professor, EEE	EEE Dept. Coordinator, IEDC
5.	Mrs. Rini Simon	Asst. Professor, CSE	CSE Dept. Coordinator, IEDC
6.	Mrs. Femy John	Asst. Professor, ECE	ECE Dept. Coordinator,IEDC
7.	Mrs. Nisa Ann Mathew	Asst. Professor, CE	CE Dept. Coordinator, IEDC
8.	Mr. Basil Baby	Asst. Professor, ME	ME Dept. Coordinator,IEDC
9.	Mr. Midhun Jose	Asst. Professor, MBA	MBA Dept. Coordinator, IEDC
10.	Mr. Mavin C	Placement officer	General Coordinator
11.	Mr. Basil Eldhose	Student S3 EEE	Chief Executive Officer

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12.	Ms. Gayathri Suresh	Student S5 ECE B	Chief Operating Officer
13.	Ms. Megha Sukumar	Student S7 ECE A	Chief Marketing Officer
14.	Mr. Allen Peter	Student S5 IT	Chief Finance Officer
15.	Mr. Eldhose Raju	Student S7 ME B	Chief Technical Officer
16.	Ms. Riyamol Sara Jayan	Student S5 EEE A	Chief Creative Officer
17.	Ms. Kavya R	Student S3 CSE B	Chief Social Officer

Objectives of the IEDC in VJCET are

● To act as an institutional mechanism for providing various services including information on all aspects of enterprise building to budding S&T entrepreneurs.

● To create an Entrepreneurial culture in the Parent Institution and other institutions in the region and to promote the objectives of NSTEDB, including programmes related to women and weaker sections of the society.

● To inculcate a culture of innovation driven entrepreneurship through student projects.

● To catalyse and promote development of S&T knowledge-based enterprises and promote employment opportunities in innovative areas.

● To respond effectively to the emerging challenges and opportunities both at national and international level relating to Small and Medium Enterprises (SMEs) and micro enterprises

Annexure - E

Innovation and Entrepreneurship Development Centre

(IEDC)

Viswajyothi College of Engineering and Technology

Report on Attending

Huddle Kerala

on 27 & 28 September 2019.

at

Leela Palace Trivandrum.

Prepared by : Shrine Sabu   **Approved by : Dr.K. K. Rajan**

Basil Eldhose   **Nodal Officer , IEDC, VJCET**

CEO, IEDC, VJCET

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Report on Attending Huddle Kerala on 27 & 28 September 2019

1.   Introduction

Huddle is the focal point for tech start-ups and other relevant stakeholders of the entrepreneurial ecosystem including the government, investors, mentors, industry, etc. The conference had two days packed with activities that included several side events like Leadership Talks, Tech Talks, Fireside chat, Startup Demo, and many more technical activities. Huddle Kerala was held on 27 & 28 September, 2019 at Leela Palace, Kovalam, Trivandrum. Shrine Sabu and Basil Eldhose, two student representatives from IEDC, VJCET attended the event. This report gives the details of the event Huddle Kerala and their experience.

2.   Program Objectives

The sessions in Huddle Kerala provided opportunities for showcasing the technology to startups, industry experts, decision-makers and others connected to the ecosystem. Besides, there was scope for partnering with the Kerala government, one of the most proactive state regimes in embracing emerging technologies and creating a vibrant ecosystem for innovation.

3.   Program Description

Huddle Kerala started on 27th September at 9: 45 AM. The welcome speech was given by Shri. Jitender Minhas, CEO, IAMAI Startup Foundation. Dr. Pawan Agarwal, a motivator, took sessions and covered the topic " A journey with Mumbai Dabbawala.". After this, various parallel workshops were held. Day 2 started with a talk on "Build for India" by Saurabh Jain– Head, Paytm. This was followed by Talk on "The entire Finnish nation as a forerunner in AI". The afternoon session had talks by Sajan Pillai on Leadership.

4.   Program Outcomes

The program was very helpful for us. With many participants including startups, industry leaders and tech entrepreneurs we had an opportunity to meet and interact with them. We got a chance to see the various products, services, and innovations that were originated by startups.

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5.   **Conclusion**

The program was over by 16:00 on the 28th. Dr. Saji Gopinath, CEO Kerala Startup Mission gave the vote of thanks to the participants.

****

Photo 1   :Entrance of Huddle Kerala

Photo 2: With Demetri Sampas, CEO, Mal-Id.

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Annexure - F

Innovation and Entrepreneurship Development Centre

(IEDC)

Viswajyothi College of Engineering and Technology

Report on Orientation Programme for IEDC Members

Conducted on

Friday 11.10.2019,

At

R & D Seminar Hall, VJCET

Prepared by : Basil Eldhose   **Approved by Dr.K. K. Rajan**

CEO, IEDC, VJCET   **Nodal Officer , IEDC, VJCET**

Report on Orientation Programme for IEDC Members Conducted on Friday 11.10.2019,

1.   Introduction

Innovation and Entrepreneurship Development Centre is being promoted in educational institutions to develop institutional mechanisms to create entrepreneurial culture in Science and Technology academic institutions. IEDC coordination committee in VJCET for 2019-20 academic year was formed on 28.08.2019. In the meeting of the VJCET IEDC coordination committee held on 04.10.2019 it was decided to conduct an orientation programme for all members of IEDC in VJCET. As an orientation programme was already conducted for first year students, the focus can be on members from other classes. Accordingly the orientation programme was organized on Friday 11.10.2019 at R & D seminar hall.

2.   Program Objectives

To create awareness about IEDC, its objectives, functions, current activities and to give an indication to the coordination committee members about their duties and responsibilities.

3.   Program Description

. Dr K K Rajan Prof EEE and Nodal officer made a powerpoint presentation on the topic " An Introduction To Innovation and Entrepreneurship Development Centre" . The programme started at 1.45 PM. The power point presentation covered in detail sub topics such as Mission of IEDC, IEDCs In Kerala, KSUM Guidelines, Objectives of the IEDCs, Functions of IEDCs, IEDC Management, IEDC Documentation, IEDC Reporting to KSUM, IEDC in VJCET, Activities of IEDC, Idea Fest 2019 and 2020, Innovation Grant Guidelines and Viswajyothi Business Incubation Centre (V-BIC). Around 100 students from different classes attended the programme. The programme was interactive and students raised many questions during the talk. Dr V K Sheela , IEDC coordinator, IT department and

Shri Jomu George IEDC coordinator EEE department attended the meeting. Dr K K Rajan introduced the coordination committee members to the participants.

4.   Program Outcome

This orientation programme was very useful to the students and they got an idea about the activities of IEDC in VJCET and also got guidance on how to proceed with their innovative ideas.

5.   Conclusion

The programme was over by 2.45 PM. Basil Eldhose, CEO, IEDC, proposed a vote of thanks to the speaker and the participants.

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Photo 1 :   Dr K K Rajan Delivering the talk

Photo 2 :   Audience During Awareness Program

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ANNEXURE -1

PROGRAMME NOTICE

An Introduction to

Innovation and Entrepreneurship Development Centre

(IEDC)

By
Dr K K Rajan,
Prof . EEE, Dean IIIC and Nodal Officer, IEDC,
Viswajyothi College of Engineering and Technology

On Friday 11.10.2019 at 1.30 PM
In R & D Seminar Hall
VJCET
All IEDC members are Cordially invited

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ANNEXURE -2
LIST OF PARTICIPANT S

CSE B
2nd Year

1) Kanya . R
2) Shahin
3) Rohit
4) Edwin
5) Vinay
6) Austin
7) Alan Anato.

ECE A

1) Rahul Sajeeth
2) Bindu V
3) Anju James
4) Anna Varghese
5) Rapana S
6) Sethulakshmi

IT

1) Kevin
2) Vijay
3) Bobby
4) Thomas
5) Nithin
6) Aakash
7) ~~Joby~~ ~~Jordy~~ Alan J
8) Albin

CSE A
2nd Year

1) Shine
2) Abin Joy
3) SAYIAN JUDE JACOB

2nd Year

ECE B

1) Jose P Thomas
2) GS Chackochen
3) Sanal Sabu
4) Jithu Bijeesh
5)

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3rd

ME-A

1) Vishnu Vinod
2) Edwin Xavier
3) Ashiq Salu
4) Nikhil Devasia

3rd year
IT

1) Sradha Sojan
2) Maria Elizabeth
3) Anitta Sunny
4) Tuby
5) Jeswin
6) All Thamm
7) Tony JoJo

3rd year
EEE-B

1) Rijamol Sara Jayan
1) Deena Johny
2) Sree-Lekshmi
3) Reshma
4) Amrutha
5) Aparna
6) Rujamol Sara Jayan
7) Minnu Augustine
8) Swanthona Treesa Jose

S5 - CS - A

1) Chris Fiji
2) Avinash Avinachan
3) Abin P Joy
4) Sumith Sunny
5) Aswin C Asok
6) Kiran Ramesh
7) Anirudh Rajeev

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Mech A   Mech B

E E E A   E E E B

1) Ayyappadas KS
2) Manas
3) Aakash
4) Athena
5) Krishnapriya
6) Basil

Civil A   Civil B

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4th year

ECE A

1) Anju Sajeev
2) Rania Roy
3) Aiswarya M Nair
4) Aleena Santo
5) Sheetal David
6) Megha Sukumar.

EEE-B

EEE-B

1) Arun Shaln
2) Tinu George
3) Jaison Kuriakose
4) Binson Sunny
5) Rony Johnson
6) Abil Jose.

4th year

ECE B

1) Vishnu M
2) Mohid Antony Jimmy

Innovation and Entrepreneurship Development Centre

(IEDC)

Viswajyothi College of Engineering and Technology

Report on Workshop on Mobile Application Development

Conducted on 16th and 17th of October, 2019

at

Mar Baselios Institute of Technology and Science (MBITS), Nellimattom

by

Kerala Startup Mission

Prepared by:	Approved by :
Participants of the Workshop from VJCET	Dr. K. K. Rajan

Report on Workshop on Mobile Application Development

1.   Introduction

Mobile application development is the process of creating an application for a mobile phone. Mobile application development has become essential for every online business, because a large number of people are accessing the internet via smart phones and tablets. Mobile app development has the ability to access a large number of potential consumers. These applications can be pre-installed on phones during manufacturing, or delivered as web applications using server-side. The web based platform used for developing mobile applications is- Thunkable Classic. Thunkable is a drag and drop mobile app builder that enables users without programming to build apps for Android and iOS.   This workshop on mobile app development was organized by Kerala StartUp Mission (KSUM)   at computer Lab-2, St. Thomas block of Mar Baselios Institute of Technology and Science (MBITS), Nellimattom on 16th and 17th October 2019. The workshop on "Mobile app development" was handled by Ms. Nitha Anilkumar, Knowledge Officer of ICT academy, Thiruvananthapuram. Seven IEDC members from VJCET attended the workshop. This report gives a brief summary of the event.

2.   Program Objectives

To impart knowledge about the basics of Mobile app development, the steps involved and the applications in which it becomes useful.   It was also intended to create awareness about the importance of developing mobile apps, thereby inculcating an interest in students to become a developer.

3.   Program Description
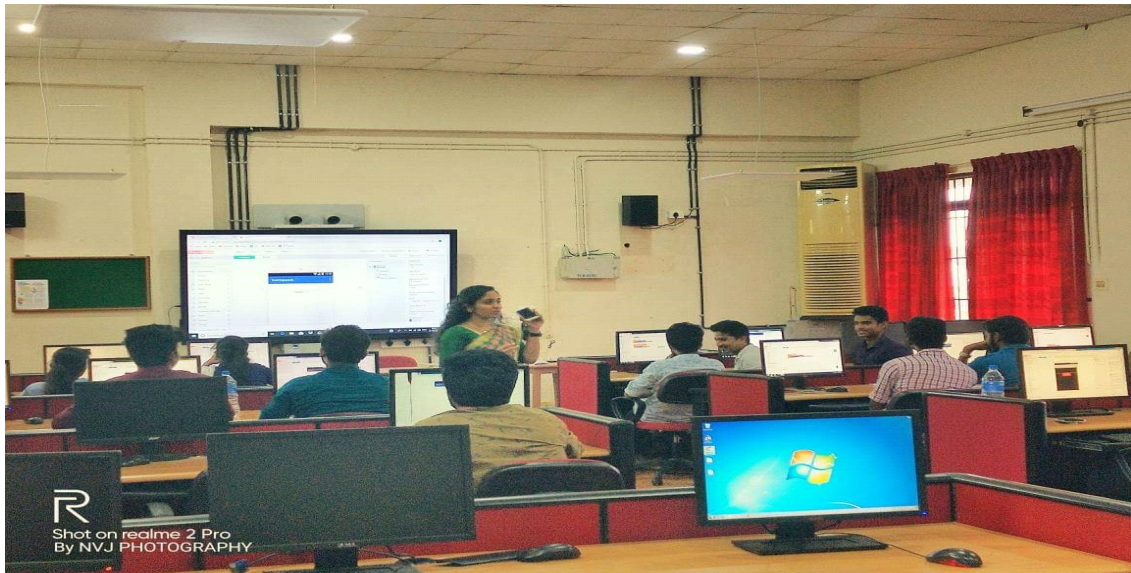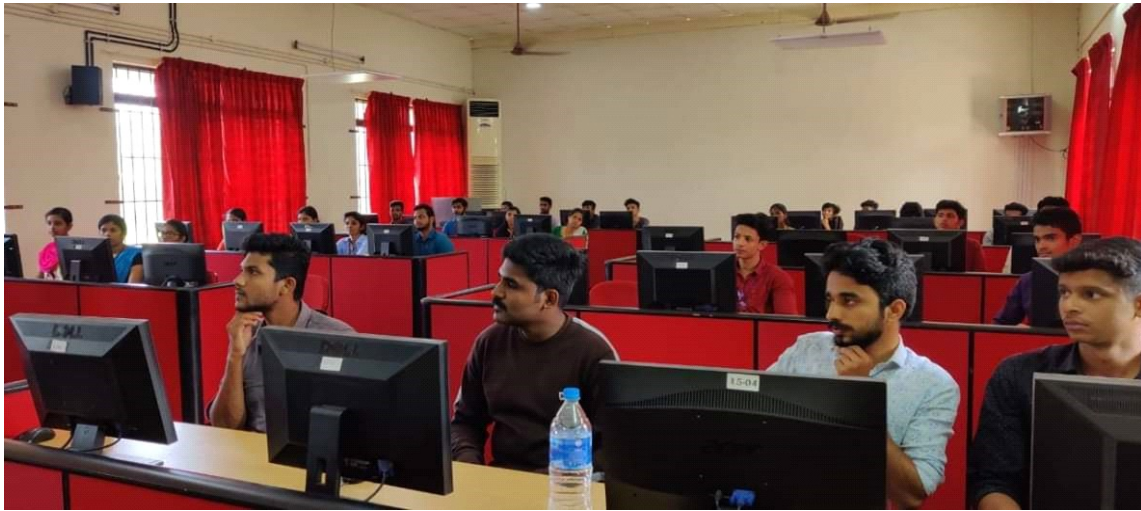
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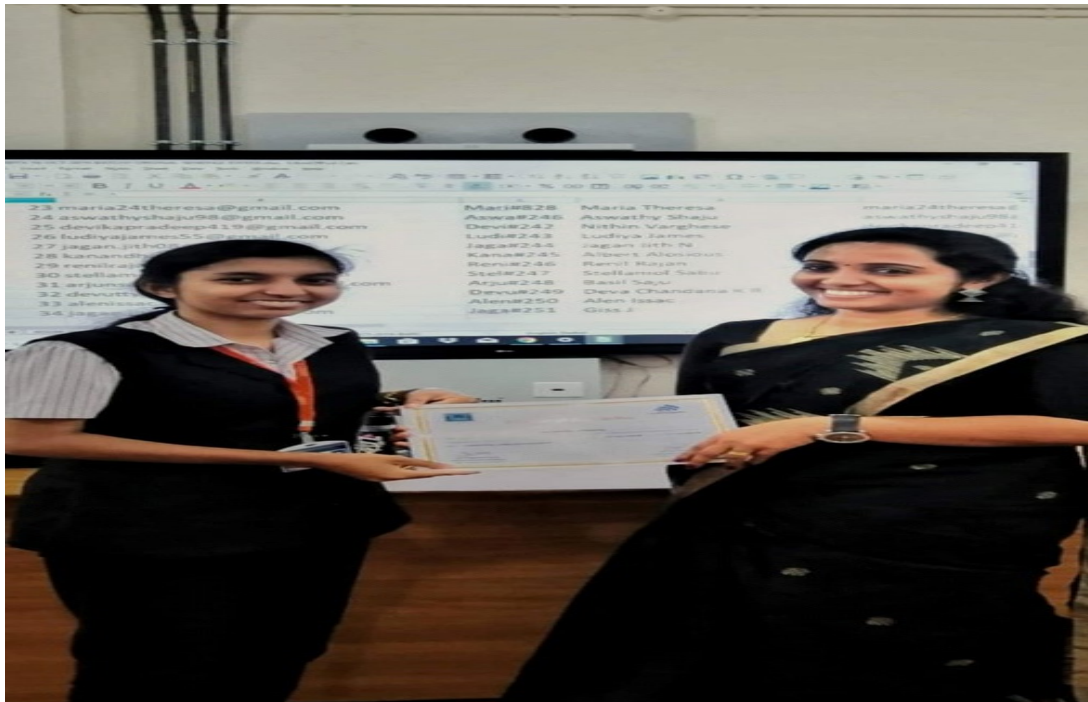Established in 2001
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The ICT Academy of Kerala in association with Kerala Start-Up Mission organized a two day workshop on" Mobile Application Development " for students. The workshop was held from 16th to 17th October, 2019. The workshop was intended for developing the mobile application development skills on the android platform. About 30 students from various colleges attended the workshop. The day 1 was started with Dr P. Sojan Lal inaugurating the workshop.

The two day workshop was handled by Ms. Nitha Anilkumar, Knowledge Officer at ICT Academy of Kerala. Mobile app development requires a significant amount of critical thinking , research, and market analysis prior to development. Nowadays mobile apps put our business in people's pockets, connecting you to a larger audience across the modern devices people use. So having a mobile app will definitely help to grow our business.

The mobile app development is done in 2 different stages. The prototype was developed on day one of our workshop and was done using Invision application. There we learned the importance of layout and the difficulty that we could face in future development etc. On day 2, our second stage started. That is, making the application and was done through the Thunkable application. And thereby we came to know more about that application and its user friendly. One who has logic could make use of this application properly.

This application have further some of the stages as follows:
i. Making targets
ii. Analysis of functions and features
iii. UI/UX Design
iv. Frontend development
v. Backend development
vi. Testing
vii. Deployment
viii. Maintenance and support

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Following are the 7 IEDC members   from VJCET who attended the workshop.

No	Name	Class	Department	Batch
1	Alphonsa Renny	S5	EC	2017-21
2	Aswathy Shaju	S5	EC	2017-21
3	Maria Theresa	S5	EC	2017-21
4	Aparna M S	S5	EEE	2017-21
5	Reshma Jolly	S5	EEE	2017-21
6	Amrutha Satheesh	S5	EEE	2017-21
7	Ciril Kurian Rison	S7	EEE	2016-20

4.   Program Outcome

The Workshop conducted was very useful for the students as they gained adequate and accurate knowledge on Mobile app development and in creating, testing and programming mobile apps. This workshop enabled the students in developing technical skills, creativity, and resolving problems involved in mobile app development and also working as a team.

5.   Conclusion

Participants of the workshop got the basic idea behind mobile application development, its importance and applications. This workshop inspired them to become successful mobile application developers. This workshop was a great success and helped students to realise the scope of mobile application development in the modern world.

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Photos of students and teachers who attended the summit.

Innovation and Entrepreneurship Development Centre

(IEDC)

Department of Information Technology

Viswajyothi College of Engineering and Technology

Report on Workshop on Data Science

Conducted on

Wednesday 16.10.2019,

at

R & D Computer lab, VJCET

Prepared by: Allen Peter	Checked by : Dr. Sheela V K	Approved by Dr.K. K. Rajan
CFO, IEDC, VJCET	IEDC coordinator, Dept of IT	Nodal Officer, IEDC, VJCET

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Report on Data Science Workshop
Conducted on Wednesday 16.10.2019,

1.   Introduction

Data science is a concept to unify statistics, data analysis, machine learning and their related methods in order to understand and analyze actual phenomena with data. It employs techniques and theories drawn from many fields within the context of mathematics, statistics, computer science, and information science. When you have so much of data like money, feedbacks, customer's data, people working, etc., you want to keep it all simple and easy to understand so that you can make improvements. This is why data science is important. Understanding the need of Data Science in this century, the IEDC and the department of Information Technology organized a workshop on Data Science on Wednesday 16.10.2019 at R & D seminar hall. The class was taken by Mr. Abhilash Pradeep and Mrs. Merin Abraham from Spectrum Company, Kochi which is a franchise of   Red Hat Academy. This document gives details of the event.

2.   Program Objectives

To impart knowledge about the basics of Data Science, the steps involved and the applications in which it becomes useful and also create awareness about the importance of Data Science, thereby inculcating an interest in students to become Data Scientists.

3.   Program Description

The IEDC & Department of Information Technology had organized a one day Workshop on "**Data Science**". On 16th October 2019, registration for the workshop started at 9.00 AM. We had kept a registration table in front of the R&D COMPUTER LAB where the event was conducted. After registration, participants were requested to assemble in the Seminar hall for the inauguration Ceremony. After inauguration at around 10.00 AM, the technical session started. The participants of the workshop were divided into groups of 2 each given a system which is pre-installed with the software 'ANCONDA PYTHON 3.7. To begin with Mrs. Merin Abraham gave details about what data science is, Introduction to Data

Science, Data wrangling, data management, exploratory data analysis to generate hypotheses and intuition, prediction based on statistical methods such as regression and classification, communication of results through visualization, stories, and summaries. Practical demonstration was also included in the workshop. At 12.15PM, lunch was arranged in the College canteen for all the participants & volunteers.

After lunch, at 1.00PM, the technical session continued with probability statistics, information theory, numerical optimisation, computational complexity theory, control theory, linguistics, Generative learning algorithms, Gaussian discriminant analysis, Naive Bayes, Support vector machines, LMS, Logistic regression, Perceptron. Exponential family, Supervised Learning and Discriminative Algorithms. Also a sample data model and the program code also was given to the participants for practical training on how to analyse data.

At 4:00 PM the valedictory ceremony was arranged.   Dr. K K Rajan Nodal officer IEDC and DrSheela V K, IEDC coordinator, Dept of IT presented their views about the workshop. The students also gave their feedback about the classes in the workshop.

Allen Peter, Finance Manager, IEDC proposed a vote of thanks to the speaker and all the participants. The programme was over by 4.15PM.

4.   Program Outcome

The Workshop conducted was very useful for the students as they gained adequate and accurate knowledge on Data Science and various fields in which data science uses scientific methods, processes, algorithms and systems to extract knowledge and insights from structured and unstructured data.

5.   Conclusion

Participants of the workshop got the basic idea behind Data Science, its importance and applications. This workshop inspired them to become successful Data Scientists . This workshop was a great success and helped students to realise the scope of data science in the modern world.

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Photo 1. Mrs.Merin Abraham taking class on Data Science

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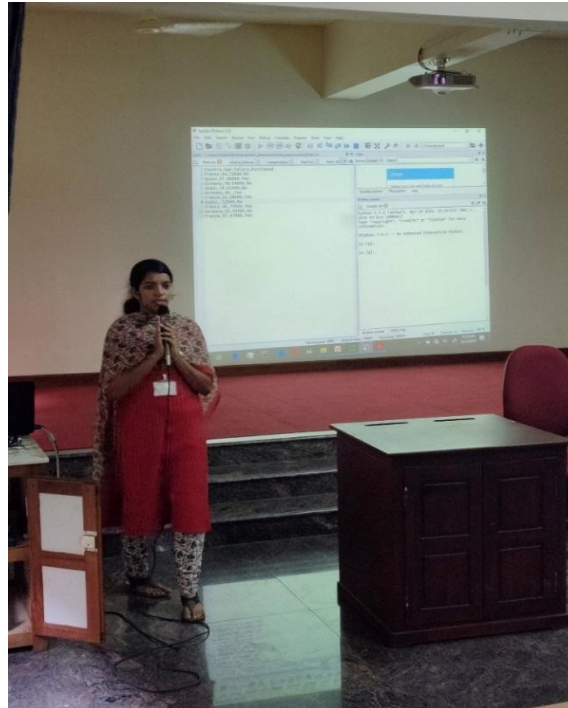
Photo 2:Mrs. Merin Abraham taking class on Data Science

Photo 3:   Audience during the workshop

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Photo 4:   Dr. K.K. Rajan presenting his views

Photo 5:   Participants of the workshop

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ANNEXURE -1

PROGRAMME NOTICE

ANNEXURE -2

List of Participants
FIRST YEAR EC A

1. Sivaganga
2. Aparna
3. Celiya Saju
4. Emy Maria Tom
5. Minnu Thampi

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FIRST YEAR EC B

1. Revathy
2. Finu James
3. Joyal Jose
4. Maria Roy
5. Meenu K.R

FIRST YEAR CS A

1. Jeffin
2. Anju Baby
3. Krishnaja
4. Parvana Prakash
5. Anandhu Krishnan
6. Anjali K.R
7. Roshan Roy

FIRST YEAR CS B

1. Adwaith P.A
2. Elizabeth George
3. Alha Mary Jacob
4. Ivin Rafi George
5. Akhil M Raji
6. Georgin Joy

FIRST YEAR IT

1. Mrudula Ann
2. Jibin Benny
3. Emma
4. Deyon

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5. Roney Saji

6. Anjali Saji

7. Alen Shajan

8. Swathy Krishna

9. Alen Salu

10. Allen Benny

SECOND YEAR CS B

1. Betsy

2. Devika

3. Aleena

SECOND YEAR EC B

1. Rosemaria Varkey

2. Andrews Saji

SECOND YEAR IT

1. Anna Anil

2. Erica S

3. Maria George

4. Harsha Thomas

THIRD YEAR EEE B

1. Uthara P

2. Sreelakshmi

3. Ashwin Abraham

4. Paul Stanly

5. Noel John Paul

6. Alias Jacob

7. Anand H

Annexure - I

Innovation and Entrepreneurship Development Centre
(IEDC)

Viswajyothi College of Engineering and Technology

Report on

IEDC   Summit   2019

Conducted on
Saturday, 19.10.2019,
at

Sahrdaya College of Engineering and Technology, Kodakara, Thrissur

By

Kerala Startup Mission

Report on IEDC Summit 2019 Conducted on Saturday 19.10.2019

1.   Introduction

Kerala Start-up Mission, the Nodal agency of Government of Kerala organized IEDC Summit 2019, Asia's largest student Entrepreneurship Summit where the students got an opportunity to experience the technological diversities and advancements through a series of technology track events, brainstorming sessions, interactive community meet ups and product exhibitions. IEDC Summit 2019 was conducted in Sahrdaya College of Engineering and Technology, Kodakar, Thrissur. Sixteen students, one faculty member, Nodal officer IEDC and the Management coordinator of VJCET, V-BIC attended this Asia's largest summit for aspiring entrepreneurs. This report gives the details of IEDC summit 2019 and highlights benefits gained by the participants.

2.   Participants   from Viswajyothi College of Engineering and Technology

Following are the 19 delegates who attended the summit from VJCET.

No	Name	Class	Department	Batch
1.	Dr K K Rajan	Nodal officer, IEDC		
2.	Shri Johnson Parayannilam	Management Coordinator, V-BIC		
3.	Mrs. Nisa Mathew	Department Faculty Coordinator,CE		
4.	Basil Eldhose, CEO,IEDC	S3	EEE	A
5.	Shrine Sabu	S3	EEE	A
6.	Allen Peter, CFO,IEDC	S5	IT	A
7.	Eldhose Raju, CTO,IEDC	S7	MECH	B
8.	Gayathri Suresh, COO,IEDC	S5	EC	B
9.	Riyamol Sara Jayan, CCO,IEDC	S5	EEE	B
10.	Shan Babu	S5	CS	B

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11.	Kiran Shaji Augustuine	S5	CS	B
12.	Kavya R, CSO,IEDC	S3	CS	B
13.	Haripriya Narayanan	S5	EEE	B
14.	Vishnu M	S7	EC	B
15.	Jephin Baby	S7	EC	B
16.	Amal Chandran	S7	EC	B
17.	Rahul Sajeeth	S3	EC	A
18.	Allen P Biju	S5	CS	B
19.	G S Chakochan	S3	EC	B

3. Program Objectives

The event accelerates the spirit of vibrant individuals to showcase their abilities linear to the technical side and also enhance their keen interest in product development and marketing. The students also got an additional benefit of experiencing the technological diversities and advancements through a series of technology track events, brainstorming sessions, interactive community meetups and product exhibitions.

4. Program Description

Summit started on 18.10.2019 afternoon and ended by 5 PM on 19.10.2019. There were different sessions, workshops and   product showcasing exhibitions running in parallel. Around 4000 aspiring entrepreneurs participated in this global event from about 214 colleges all over Kerala.

4.1   IEDC Nodal Officers Meet

As part of IEDC Summit 2019 a Nodal officers meet was arranged   on 18.10.2019.   Dr K K Rajan, IEDC Nodal officer VJCET attended the meeting.   Nodal officers of IEDC from more than 200 academic institutions were invited for the meeting. The meeting was chaired by Dr Saji Gopinath. Rev. Fr. George Paramel, Executive Director Sahrdaya College of Engineering delivered   the welcome address. Dr Saji Gopinath delivered   an introductory address and explained the present status of IEDCs in Kerala and

suggested the way forward to meet the objectives. Ms. Bian Li co-founder of The Hungry Lab, delivered a talk on different aspects of entrepreneurship development. She is an entrepreneur, futurist and former investment banker with more than fifteen years of experience, working with hundreds of entrepreneurs of all sizes across 30 countries. She is now the co-founder of The Hungry Lab, where she specializes in building startups and designing the collaborative value networks and "global" ecosystems needed to grow them.

Post dinner session of Nodal officers night was held at PACS, Kallottukara, Irinjalakuda. The meeting started at 10 PM and went upto midnight 12.00. Dr Saji Gopinath presided over the meeting. Shri Tom Thomas of KSUM has given the introductory remarks. Shri Sherine, Nodal Officer Amal Jyothi college of Engineering and Technology moderated the discussions. Nodal officers of different academic institutions expressed their experiences, difficulties and gave many suggestions for improving the functioning of IEDCs.

4.2   Inaugural session

Dr. Rajasree M. Vice Chancellor A P J Abdul Kalam Technological University was the chief guest of the inaugural function. Rev.Fr.George Paramel Executive Director Sahrdaya College of Engineering welcomed the gathering. Shri Saji Gopinath CEO, KSUM talked about Fuelling Innovation through IEDCs. Dr Rajasree lighted the lamp and inaugurated the Summit. She explained the need for active participation of students in IEDCs along with their academic activities. Dr. Elizabeth Elias, Director Sahrdaya College of Engineering and Technology, felicitated the gathering. Dr. Nixon Kuruvila, Principal Sahrdaya College of Engineering proposed vote of thanks.

4.3   Technical Sessions

There were many interesting and inspiring talks in the technical sessions. Introduction to BRINC, a multinational entrepreneur accelerating firm was given by the company's representative. The investment thesis, accelerators, services, capital, and communities of BRINC are designed to help founders to use technology as a tool to address deep challenges in the world. Mr. Siddhant Agarwal, Program Coordinator, Google Developer Relations talked about the Build for Digital India Program by Google. Healthcare, agriculture, traffic, pollution, women's safety, education, energy, environment
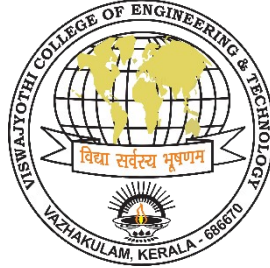
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are just *some* of the areas that require innovative solutions. Google and the Ministry of Electronics & Information Technology (MeitY) have come together to launch Build for Digital India. Anybody having a clear idea, on any India-specific problem, trying to solve with technology and want to relentlessly pursue that technical solution can apply now and join them on this journey. Mr. Siddhant Agarwal advised students to register and be actively involved in the programme. Ms. Deena Jacob, Co Founder & CFO, Open Financial Technologies made an interesting presentation. She covered various financial and funding aspects of entrepreneurship development. She shared her long experience in this area. Shri Nikhil NP the CTO of Genrobotics made a presentation on their long journey from an IEDC of MES College of Engineering Kuttippuram to a 200 Crore company. Various stages of their developments and turning points were highlighted in the presentation.

4.4   Workshops

Following technical workshops were conducted as part of IEDC summit 2019.

a)   Extended Reality Workshop by I Boson

b)   Blockchain Workshop by KBA

c)   Action on Google workshop

d)   Design Thinking workshop by DISQ, a TCS Foundation Initiative

Shri Eldhose Raju from VJCET attended Blockchain Workshop conducted by KBA. The Design Thinking workshop was attended by Shan Babu of VJCET.

4.5   Exhibition

A Start Up Expo was organised as part of IEDC summit 2019. It was an opportunity for startups to showcase their innovative products and students to witness achievements of start-ups . The exhibition was a real eye opener to aspiring young entrepreneurs.

5.   Program Outcome

This summit was very useful to the students because students got an opportunity to experience the technological diversities and advancements through a series of technology track events, brainstorming sessions, interactive community meet ups and product exhibitions. The summit was a real inspiration to all the participants.

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6. Conclusion

IEDC summit 2019 was well organised by Kerala StartUp Mission. It was an opportunity for students and aspiring entrepreneurs to listen to eminent personalities and established entrepreneurs. VJCET had very good participation and involvement in the summit. The knowledge and experience gained by VJCET delegates should be effectively utilised to develop a start-up friendly ecosystem in the college.

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Photos of students and teachers who attended the summit

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Annexure - J

KERALA
STARTUP MISSION®

Idea Fest - 19

VJCET Team Selected for Funding Support upto Two Lakhs.
Project : AGR-E
(AGR- E is a CNC Farming Machine)
One of the 18 projects selected by
Kerala Start Up Mission
out of 1600 projects from all over Kerala
Hearty Congratulations to the Team !!!

Team members

| Firoz S | Erfan Muhammed C.K [C] | Bilal Shamsudhin | Sanjay M S |

S7 A, Department of Mechanical Engineering

**Innovation and Entrepreneurship Development Centre
(IEDC)
Viswajyothi College of Engineering and Technology**

Report on workshop

EXPLORING THE POTENTIAL OF ENTREPRENEURSHIP AND

INTRODUCTION TO TEQNOCART

on

15th November 2019

at

R & D Seminar Hall

Prepared by: Gayathri Suresh
    COO, IEDC-VJCET

Approved by: Dr. K. K Rajan
    Nodal Officer, IEDC-VJCET

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Report on   the Workshop Conducted on 15 November 2019

1.   Introduction

The workshop conducted by IEDC, VJCET on 15 November was about the topic '**Exploring the Potential of Entrepreneurship and Introduction to Teqnocart'**. The workshop was conducted in an intention to provide the students an ideal opportunity to delve deep into the vast possibilities of entrepreneurship, motivational factors, resources, entrepreneurial abilities and explore the immense potential of entrepreneurship. This was an ample platform to learn and understand the key features of **Entrepreneurship** along with a brief introduction to **Teqnocart**, one of the success stories of S5 Viswajyothians.

2.   Program Objective

The objective of conducting such a workshop is to develop and mould young entrepreneurs and to invite the students who have innovative ideas into the real world of entrepreneurship. Also, it is intended to make students familiar with KSUM, the idea grants and helps that KSUM provides to young entrepreneurs. Behind this, the workshop aims at introducing **Teqnocart**, one of the startups from S5 students of our college.

3.   Program Description

The workshop had begun by 12 pm with a warm welcome speech by Mr. Sanoj Saju. This event was divided into 3 sections. First section was handled by Ms. Gayathri Suresh, COO, IEDC and CFO, Teqnocart Innovations. This section describes what entrepreneurship is, the importance of entrepreneurship and the story of Teqnocart. The next section was taken by Mr. Shan Babu, CEO, Teqnocart Innovations which enabled students to get a brief knowledge about KSUM, idea grants, steps to register a startup and different types of companies. The next section was handed over to Mr. Jetson Joseph. This last section describes **Edu-Tech**, an educational platform from Teqnocart which provides internships, project guidance, workshops and seminars.

4.   Program Outcomes

This workshop was truly a motivation for the students. It helped a lot to know about the processes of registration, funding, things that should be kept in the mind of each aspirant who have innovative ideas and keen to enter into the world of entrepreneurship

5.   Conclusion

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The workshop was wound up by 1 pm with a small speech by Dr. K. K. Rajan, Nodal Officer, IEDC followed by the vote of thanks was delivered by Mr. Robin Augustine.

Workshop Participants with Nodal Officer And Assistant Nodal Officer

Shri Shan Babu, MD Teqnocart Addressing the Students

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Vote of thanks by Shri Robin Augustine ANO

Table 1 : List of participants

Sl.No	Name	Department	Class
1.	Roshan Shaji	CS	S2CSB
2.	Allen Sajimon	CS	S2CSB
3.	Hari gokul S	ME	S3MEA
4.	Adhul johns	CS	S5CSB
5.	Judy Abraham	CS	S5CSB
6.	Radhika C A	EC	S5ECB
7.	Susan Ranju	EC	S5ECB
8.	Sharon Jos Johnson	CS	S1CSB
9.	Amal Abraham	CS	S1CSB
10.	Mathew K Shibu	CS	S1CSB
11.	Binto Sunny	EEE	S5EEEA
12.	Antony Tomy	IT	S5IT
13.	Juby Thankachan	IT	S5IT
14.	Albin John	EC	S5ECA
15.	Jerrin George	EC	S5ECA
16.	Aldo Joy	EEE	S5EEEA
17.	Sayian Judy Jacob	CSE	S3CSA
18.	Dany Tomy	IT	S1IT
19.	Deyon Sebastain	IT	S1IT
20.	Shilton Vijayan	EEE	S5EEEA
21.	Amirtha Satheesh	EEE	S5EEEB
22.	Reshma Jolly	EEE	S5EEEB
23.	Joel Sabu	ME	S3MEA
24.	Nigel Mathew	ME	S3MEA

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Annexure - L

Innovation and Entrepreneurship Development Centre

(IEDC)

Viswajyothi College of Engineering and Technology

Report on

VJCET Idea Fest-2019

Prepared by:	Checked by :	Approved by :
Dr. Sheela V K, CE Dept. Coordinator	**Mr Robin Augustine, ANO**	**Dr. K K. Rajan, Nodal Officer**
Mr. Jomu M George , EEE Dept. Coordinator		
Mrs. Rini Simon CSE Dept. Coordinator		
Mrs. Femy John, ECE Dept. Coordinator		
Mrs. Nisa Ann Mathew, CE Dept. Coordinator		
Mr. Basil Baby, ME Dept. Coordinator		

Report on VJCET Idea Fest 2019

1.   Introduction

Innovation and Entrepreneurship Development Centre (IEDC) in association with Viswajyothi   Business Incubation Centre (V-BIC)   of Viswajyothi College of Engineering and Technology organized   Idea Fest-2019 during the last week of October 2019. This event had focused exclusively on innovative technology based ideas of students for developing a prototype or product. This will enable students to effectively participate in the state level Idea Fest competitions held by Kerala StartUp Mission.

Students could   participate in a team (maximum 4 members) or as individuals. Selected 'Idea' would get an initial fund upto Rs.5000 each, for prototype development. The first step of idea fest was to prepare and submit a one page write up of the proposed Idea to the IEDC department coordinators. The deadline for submission of 'Idea' was Monday 26th August, 2019. This   report   gives the details of   VJCET Idea Fest 2019   and gives the selected idea of VJCET for   further development.

2.   Participants   of VJCET Idea Fest 2019

The applications were s*egregated* department wise. List below   gives the list of one page write received on Ideas.

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Sl.No.	Title of Idea	Name of Team Members	Class
Department of Civil Engineering			
1.	Amphibious Cage	Abhinand S, Ajwin Jose Francis, Charles George, Rahul Raj	S7 CE-B
2.	A solution for bund breaching	Fiza Shameer, Jils Roy, Leona Sojan, Mathew J Puthiyadam	S7 CE-A
3.	Superadobe technology for Temporary Shelters	Jonath Shibu, Albin Antony, Damy Jose	S7 CE-B
4.	Mini Plastic Recycling Unit	AnjanaJayakumar, AshnaHameed, FathimaShirin, Jills Roy	S7 CE-B
5.	Piezoelectric Surfaces	Abrin Samson, Angel Roy, BadushaKani, Jesna Nicholas	S7 CE-B
6.	Fibre Optic Sensors for Structural Health Monitoring	AnjanaJayakumar, AshnaHameed, Fathima Shirin, Jills Roy	S7 CE-B
7.	Opportunities of "Sponge City" as a solution for Urban Waterlogging & water scarcity	Mathews Mathew, Dona Elizabeth Dolly, Jaison James	S7 CE-B
8.	Kitchen Tank	Anto Paul, Benila Raj, Kevin Joseph, Varsha Antony	S7 CE-B
Department of Computer Science and Engineering			
9.	Agrobuy App	Thomas James	S7CSA
10.	The intelligent Safety Mask	Ananthakrishnan S Nath Sudev S(S5CSB) Melwin Vincent)	S5CSB

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11.	Smart Recycle App	Allen P Biju(Govind V Shenoy(S5CSB) Kiran Shaji Augustine Gayathri Suresh	S5CSB S5CSB S5EC
12.	Interactive & Effective Online Education System	Melvin Shaju	S7CSA
13.	An Online Site to Trade Waste materials	Kevin Prince	S3CSB
14.	Interactive & Effective Online Education System	Melvin Shaju	S7CSA
15.	An Online Site to Trade Waste materials	Kevin Prince	S3CSB
	Department of Electrical and Electronics Engineering		
16.	Automatic Temperature Controlled Household Electric Ceiling Fan	Nandukrishna B, Eldho Varghese	S7 B EEE
17.	College CCTV based student and teacher automatic face recognized attendance system	Kevin Mathew George, Philip Thomas Anandh H Paul Stanly	S5 B EEE
18.	Automatic Shopping Trolley	Akash Ashokan, Arun Shalu Amritha Satheesh Kumar Aparna R Nair	S7 B EEE
19.	Manual Tapping Machine	Pranav Sathyan, Archana P Raju	S7 B EEE
20.	Piezoelectric Charging Mat	Ashmin Shinob, Sreejith P S Vishnu Ajay	S5 A EEE
21.	Smart School Bag	Nikhil Joseph, Pranav Satyan Archana P Raju Jerin Jovin	S7 B EEE
	Department of Electronics and Communication Engineering		
22.	Fire Breaker Drone	Roshan Biju, Philip Biju, Don Mathew Varghese, Albin Roy	S1 ECA

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23.	Sun Tracking Solar Panel	Megha Biju, Riya Benny, Aleena Alocious	S1 ECA
24.	Speed control of fan according to room temperature	Maria Sabu	S1 ECA
25.	Foot board clearance	Maria Sabu	S1 ECA
26.	Electromagnet vehicle wheel	Hrishi Venkitesh M	S1 ECA
27.	CNC Machine	Hrishi Venkitesh M, Sebin Jaison, Jose Thankachan, Jayasurya Krishnakumar, Naveen B Thachampuram	S1 ECA
28.	Smart Charging with Electrical Fan	Biyanka Mani	S1 EC B
29.	Motion Based Message Conveyer for Disabled People	Pranav Pradeep	S1 EC B
30.	Accident Detection and Warning System	Tony Kurian	S3 ECA
31.	Automatic Fire Alarm	Alex Antony, Albin K Bijo	S3 ECA
32.	Body Detector	Liya Jojo, Augustina K Martin,Helno Eldho, Anu Shalet Philip	S5 ECA
33.	Realistic Touch screen	Nelson Joseph, Vyshak Anil, Alwin C Varghese, Alfred Roy	S5 ECA
34.	Intelli Helmet	Harisankar S	S5 ECB
35.	Next Gen Biometric in Resource-Constrained Healthcare	Joan P, Chandini Binu, Anjana S	S7 ECA
36.	Brain controlled wheelchair	Megha Sukumar	S7 ECA
37.	Fire fighting Robot with position tracking and instant help	Nithin Bose Tharakan	S7 ECA
38.	Under ground water Detection	Tony George	S7ECA
39.	Electric Line Break Detector & Resolver	Midhun Murali Krishna	S7 ECA
40.	Fingerprint voting machine	Akhil Roy, Jebins Jois, Christo Jojo, Mathews Binoy	S7 ECA
41.	Semi-Autonomous Reconnaissance & Surveillance System	Ceril Joseph, Basil Martin Tom, Akhil K Unnikrishnan	S7 ECA
42.	Portable Programmable Medication Reminder	Ruble Sara, Jewel Jimmy, Lakshmipriya	S7 ECA

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43.	Development of Low power Sensor Node for Plant Monitoring System	Sneha sunny, Aleesha Sara Mathews, Liner Reji	S7 ECA
44.	Electromyography based hand gesture recognition system for upper limb amputees	Sneha sunny, Aleesha Sara Mathews, Liner Reji	S7 ECA
45.	Blue Eyes Technology	Anju Joly, Eline Liz, Parvathi Suresh	S7 ECA
46.	Smart water monitoring	Merin Thomas, Harsha Jose, Radhika Sabu	S7 ECA
47.	Automated external Defibrillator in Robotic Ambulance	Leenu S,Dhanya Joby, Sruthy Jayachandran	S7 ECA
48.	Load shedding time management with programmable interface	Anusree C S, Chithira Mahesh, Shilpa Lalu	S7 ECA
49.	Smart Car Plate Recognition System	Jeffin Jose, Benjamin Baby Jacob, Jince Jolly	S7 ECB
50.	Underground Object Detection using mmWave	Alan Shaju	S7 ECB
51.	Radar System using Arduino	Anu Grorge, Aleena Joshy, Arya K S	S7 ECB
52.	Stroke Rehab & Exercising Glove	Jebhin Baby,Amal Chandran, Vishnu M	S7 ECB
53.	Electronic Co-pilot headlamps	Mohid Antony Jimmy, Adorn P Sebastian, Jinu Jaimon	S7 ECB
54.	Optical Music Notes Recognition for printed music score	Mohid Antony	S7 ECB
Department of Information Technology			
55.	Augmented reality glass	Aswin Krishna	S1 IT
56.	New tracking software for government investigation agencies	Aswin Krishna	S1 IT
57.	Bellagio Digital Store	Bennet Joy	S1 IT
58.	Electronic Black Board Eraser	Jeril Jose Bennet Joy Basil Biju Alan Siby	S1 IT

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59.	Personalized website for news and latest technology	Deyon Sebastian	S1 IT
60.	Virtual projector	Haneesh K.D	S1 IT
61.	Automatic cocoa cutter	Arpitha P Varghese Soniya Sunny	S7 IT
62.	Automatic gas stove-efficient leak detection	Vivek .P. Varghese Eldho Sabu Basil James	S7 IT
63.	Waste management using interactive machine	Motty Thomas Gowri .J Jeseena Jaison Sangi Jose	S7 IT
64.	Automatic machine for plucking nutmeg	Abhirami.A Hisana Anita	S7 IT
65.	Cleaning solar panel	Swathy Krishna	S1 IT
66.	Weather sensing indoor light	Binto Tom Joseph	S1 IT
67.	Energy reduction technology	Vivek .P. Varghese Eldho Sabu Basil James	S7 IT
68.	Beyond connect & learn	Rahul Vinod Amal Shyjo	S5 IT
69.	Interactive real world shooting Game	Blesson Manjiakunnel Roncy Saju Amjith Kumar	S1 IT
Department of Mechanical Engineering			
70.	Portable Nutmeg Separator	JIPIL P CHETTOOR Eldhose Raju Albin Paul Harikrishnan A S	S7 ME B
71.	AGR-E, An innovation to revitalize the availibility of good food in urban areas.	Firoz S Erfan Muhammed C.K Bilal Shamsudhin Sanjay M S	S7 ME A

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72.	Automated Weed Controller	Kevin G Sagar Vincent Ameer E A Aldrin Baby	S7 ME A

3. Idea Discussion Meet

Prior to the final round of **VJCET Idea Fest-2019**, a discussion meet was organised on Friday, 30.08.2019 for refining the innovative business ideas of students and faculty members. Faculty members and students of each department of VJCET are required to submit their innovative technology based idea for developing into a prototype or product before 26.08.2019. The idea should have marketing feasibility and the potential to develop to a profit making business in the long run. Dr. K. C. Chandrasekharan Nair, co-founder of Technopark Trivandrum, former CFO,Techno park and Secretary & Registrar, Technopark TBI will chair the discussion meet and look into the feasibility to convert an Idea into a start-up venture. In the discussion meet, separate sessions are arranged for different departments as follows. Venue of the meeting was the VJCET conference room.

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4.   Idea Evaluation

Idea evaluation was done in each of the six departments. An expert committee headed by the Head of the department has carried out the evaluation. IEDC department coordinator, technical experts and domain experts   were   members of the evaluation committee.

5.   Ideas Selected For Financial Support

Sl. No.	Title of Idea	Team Members	Class
1.	Beyond Connect & Learn (A learning platform to link Academic Community)	Rahul Vinod Amal Shyjo	S5 IT
2.	Automated Attendance Registering System (AARIS)	Kevin Mathew George, Philip Thomas Anandh H Paul Stanly	S5 EEE B
3.	Amphibious Cage	Abhinand S, Ajwin Jose Francis,	S7 CEB

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		Charles George, Rahul Raj	
4.	Agrobuy App (IT based marketing of agricultural products)	Thomas James	S7CSA
5.	Stroke Rehab & Exercising Glove	Jehhin Baby Vishnu M Amal Chandran	S7 ECB
6.	Portable Nutmeg Separator	Jipil P Chettoor Eldhose Raju Albin Paul Harikrishnan A S	S7 ME B

6.   Conclusion

Seventy   two teams participated in the idea fest, which   clearly shows the enthusiasm of students and the penetration of IEDC message to student community in VJCET. The discussion meet was arranged for refining the ideas that had helped the students in making suitable corrections and modifying the idea. The evaluation has been carried out at the department level to encourage students of all departments. The quality of projects proposed in the idea fest 2019 were really good. Selected six projects/Ideas will be taken up for proto type development with support IEDC and VJCET. They will be presented in the upcoming KSUM idea fest 2020.

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Innovation and Entrepreneurship Development Centre

(IEDC)

Viswajyothi College of Engineering and Technology

Report on Attending the Workshop Conducted by

National Cyber Safety Security Standards
At
Integrated Startup Complex, Kalamassery, Cochin

on

4th December, 2019

Prepared by : Dr K K Rajan

Approved by : Dr.K. K. Rajan

Nodal Officer , IEDC, VJCET

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Report on Attending the Workshop Conducted by National Cyber Safety Security Standards

1. **Introduction**

The National Cyber Safety Security Standards is in the process of setting up National Defence Resource Centres (NDRC) across the country. The National Cyber Safety and Security Standards conducted a half day workshop for IEDC nodal officers in partnership with Kerala Startup Mission as follows.

Date: 4th December, 2019
Venue: Integrated Startup Complex, Kalamassery, Cochin
Time: 10:30 am

The Resource centres will play a critical role in disseminating awareness about Cyber security and safeguard our citizens from the current threats in the cyberspace.

2. **Objectives Workshop**

The objective of this workshop by National Cyber Safety and Security Standards is to provide awareness to the stakeholders in an effort to improve the state of Cyber Security both at domestic and international level and to share how an IEDC institution can register and can be established as a National Cyber Defence Resource Centre (NCDRC).

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3.   Program Description

The Workshop started with an introductory note by Shri Riyas Mohamed Project Director, Kerala startup mission. Ms O U Sreekutty IEDC coordinator, KSUM attended the meeting. There were around 35 nodal officers from different IEDCs across Kerala.   Dr. E. Khalieraaj Addl. Director – General, National Cyber Safety and Security Standards attended the meeting. He has given a brief account of activities of NCSSS, about National Cyber Safety and Security Standards and threats in the Cyberspace towards National Security. Subash Babu P K , State Head Kerala attended the meeting and explained about activities of NCSSS in Kerala and what can be done in our colleges with the involvement   of IEDCs.

4.   Program Outcomes

The program was very helpful to the nodal officers. It has initiated   the thought process of setting up NCRDC in our college. Contact details of Subash Babu P K , State Head   Kerala, is   given   for   further   support.   subashbabupk@ncrdc.res.in, resourcecentre@ncrdc.res.in, Mobile : 9946490900.

5.   Conclusion
The program was over by 13:10 hrs with a vote of thank by Shri Riya Mohammed.

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Photo 1 : Workshop conducted by NCSSS at KSU Kalamassery
****

Innovation and Entrepreneurship Development Centre

(IEDC)

Viswajyothi College of Engineering and Technology

Report on Attending

Kochi Design Week

on

12ᵗʰ, 13ᵗʰ and 14ᵗʰ of December, 2019

at

Bolgatty Event Centre, Ernakulam

Prepared by : Minu George   Approved by : Dr.K. K. Rajan
　　　　　　Vanitha Rugmoni   Nodal Officer, IEDC,
　　　　　　Assistant Professors,   CEO, IEDC, VJCET
　　　　　　VJCET

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Report on Attending Kochi Design Week

1. Introduction

Kochi Design Week is India's largest annual International Design Festival of creative minds to meet & discuss the new facets of the design & creative fraternity. It gathered instigators from different parts of the world to imagine, ideate, innovate, and design for a better tomorrow. Kochi Design Week (KDW) strives to create a sustainable ecosystem through innovative and visionary technology enabled & design thinking. KDW consists of an array of independent events stitched together with a design thread. Inquisitive individuals can learn and interact through workshops, panel discussions, keynote speeches, exhibitions, and many more events organized as a part of the design week where they can listen, and discuss with the industry experts on the future of design.

2. Program Objectives

Pioneers and leaders of the design world will come together to discuss the current and future of design and trends. Kochi Design Week is the ideal place for the best advanced and perfect design inspirations. Informative keynote sessions and thoughtful panel discussions by renowned designers and decision makers will captivate and ignite your design spirit.

3. Program Description

Kochi Design Week started on 12th December at 9: 30 AM. The welcome speech was given by M Sivasankar IAS IT Secretary, Secretary to Chief Minister, Govt of Kerala, Presidential address by S D Shibulal Co-Founder, Infosys and Axilor Ventures, Inaugural Address by P Sreeramakrishnan, Speaker, Kerala Legislative Assembly, Felicitation by Saji Gopinath, CEO Kerala startup mission, Sasi P M, CEO, IT parks, Kerala and V. Sunil Kumar founder, MD, Asset Homes. After this, various keynote sessions, panel discussions and workshops were conducted at different venues. Day 2 started with an opening remark by V. Sunil Kumar, MD, Asset Homes. It is followed by a Keynote session in Innovation in Architecture by Ar. Padmashree G Shankar, Founder/Chairman Habitat Technology Group. It is followed by various keynote sessions and talkathons. Day 3 started with a welcome speech by

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Alok Nandi, creative director, Architempo & President, IxDA. Thereafter various master classes in Universal design for an Inclusive World by Kavitha Murugkar and Urban Infrastructure, smart city Design by David Ludlow etc. were conducted. Finally there was a grand valedictory function conducted with a valedictory address by Hon. Chief Minister of Kerala, Pinarayi Vijayan and felicitation by Hibi Eden, MP, T.J Vinod MLA and Soumini Jain Mayor, Kochi Municipal Corporation

4. Program Outcomes

The program which included various industry experts and tech entrepreneurs was very helpful for us as the participants. We had an opportunity to meet and interact with them. We got a chance to know the trends in the design world too.

5. Conclusion

Participation in Kerala Design Week was great opportunity for us. The knowledge and know-how gained will be transferred to students thorough IEDC forum.


Photo 1: The inauguration ceremony.

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Photo 2: A panel discussion on Designing for experiences where Digital and Physical Worlds converge.

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Photo 3: An Exhibit by Maker Village

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Photo 4: Maker Fest

Photo 6: Valedictory Function

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Photo 7: Minu George & Vanitha Rugmoni   participants from VCET

Photo 8: Minu George &Vanitha Rugmoni   participants from VCET

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Photo 9: Minu George &Vanitha Rugmoni participants from VCET

Annexure – O
Innovative Students Projects
AARIS –Automated Attendance Registering System
Abstract

AARIS –Automated Attendance Registering System is software that creates attendance sheets based on CCTV camera footage from each class in an academic institution by recognizing the faces and uploading attendance sheets in time to an online database and updating. AARIS focuses on creating human free automated attendance registering without time consumption and delay. Current Practices in academic institutions for attendance registering are manual method of teachers taking attendance via student calling, Electronic method of Biometrics and RFID tags etc. But the problems faced by these methods are time consumptions since they need a third person or the person needs to wait for registering attendance, presence of human error is another factor, and malpractices in physical attendance registers. So to overcome these problems we look forward to CCTV cameras

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installed in the college premises and classrooms. They are working 24/7 for security purposes. The idea is to find a new purpose for cams by processing live footage, recognize persons sitting inside classrooms through face recognition and make attendance sheets from it and make an online database to store information and can be accessed from online real-time.

AARIS Prototype Development

Team Members

Kevin Mathew George   **H Anand**   **Paul Stanly**   **Philip Thomas**

Stroke Rehab And Exercising Glove

Abstract

In India, more than 70,000 people suffer a stroke each year and approximately two-thirds of these individuals survive and require rehabilitation. Paralysis is one of the most common disabilities resulting from stroke. The paralysis is usually on the side of the body, opposite to the side of the brain damaged by stroke, and may affect the face, an arm, a leg, or the entire side of the body. Even though rehabilitation does not reverse brain damage, rehabilitation can substantially help the affected person to achieve the best possible long-term outcome. Stroke patients may have difficulty with everyday activities such as walking or grasping objects. So we are focusing on implementing a hand glove which provides daily exercising for the hand based on signals acquired from electromyography (EMG) sensors and also heating up the paralyzed hand in order to ensure the blood flow, which may otherwise lead to serious health problems.

An ischemic stroke or "brain attack" occurs when brain cells die because of inadequate blood flow. When blood flow is interrupted, brain cells are robbed of vital supplies of oxygen and nutrients. About 80 percent of strokes are caused by the blockage of an artery in the neck or brain. Paralysis is one of the most common disabilities resulting from stroke. The paralysis is usually on the side of the body opposite the side of the brain damaged by stroke. This one-sided paralysis is called hemiplegia. Stroke patients with hemiparesis or hemiplegia may have difficulty with everyday activities. Stroke patients may lose the ability to feel touch, pain, temperature, or position. Sensory deficits also may hinder the ability to recognize objects that patients are holding and can even be severe enough to cause loss of recognition of one's own limb. Some stroke patients experience pain, numbness, or odd sensations of tingling or prickling in paralyzed or weakened limbs. Patients who have a seriously weakened or paralyzed arm commonly experience moderate to severe pain that radiates outward from the shoulder. Most often, the pain results from lack of movement in a joint that has been immobilized for a prolonged period of time (such as having your arm or shoulder in a cast for weeks) and the tendons and ligaments around the joint become fixed in one position. This is commonly called a frozen joint. Our

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initiative will help in order to prevent this condition.

Passive movement at the joint in a paralyzed limb is essential to prevent painful freezing and to allow easy movement if and when voluntary motor strength returns. Some muscles on the affected side may become stiff (most often at the wrist, fingers and the ankle) which can limit movement at the joint and some people may develop muscle spasms or a type of stiffness. So this project aims to provide a moving action for the hand, including the fingers, based on information acquired from impulses obtained using electromyography (EMG) signals and also providing a heating effect to the hand in order to prevent blood clotting. This is important, because otherwise frozen joints will lead to serious health problems.

The block diagram of the proposed system is given below. The EMG sensor acquires the EMG signals and based on the signals the servo motor will rotate to give the hand the required motion. The temperature is monitored and the electric heat pad provides the heating effect.
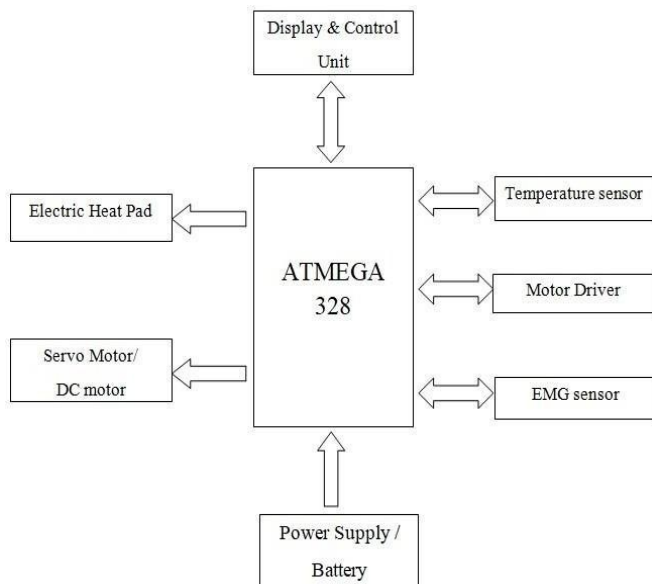
Block Diagram
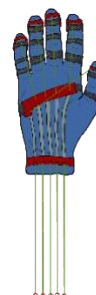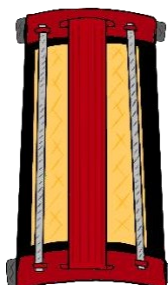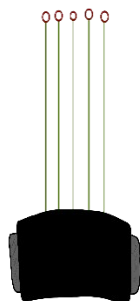
Illustrated Design

Team Members

Amal Chandran   Jephin Baby   Vishnu M

Nut X - Portable Nutmeg Separator

Abstract

Nutmeg is one of the major cash crops in South India. The oil extracted from nutmeg and nutmeg   is a very valuable spice in the entire world, especially in the European countries. Large quantity and variety of aromatic compounds in the seed and mace of the nutmeg have led to the historic and continued use of nutmeg and mace as spices. Products of nutmeg and mace are used in cosmetic and pharmaceutical industries also.

There is a large difference in the price of nutmeg without shell and with the shell. Due to the lack of an effective machine and high labor intensive process, currently farmers sell the nutmeg with shell. It decreases their earning. As per our studies and discussion with the farmers and industry, we found that the intermediate people in the industry buy it from farmers at a low price and break the shell, then sell it at a larger price. By introducing this simple Portable Nutmeg Separator   the farmers themselves can crack the shell and earn more income. It reduces the workload and physical stresses of the nutmeg farmers and saves their time as compared with manual cracking. It is affordable to small scale farmers and increases their profit.

Nutmeg is available in various sizes. Sorting of nutmeg must be done before cracking. In the sorting mechanism a nut is put in one center section of a vibrating sieve. It is passed over to the curved path based on size. Then the nut is put into the chute. It is fed to different compartments according to the size. Rotor of the nutmeg separator is rotated by the motor. As the rotor hits the nut, it is compressed against the adjustable stationary part of the separator and driving rotor, and the impulse force causes the shell to break.The separated nut and shell fall downwards, shell get separated by a sieve and nut is collected in the collection tank.

Expected Outcome of this project will be a creative, portable, economic design of a nutmeg separator which will be very useful to the farmers to carry out the nutmeg cracking on their own and earn more profit. The product ensures safety   to the operator and retains the quality of the nutmeg. We are planning   to include a processing unit with the separator. The   Processing unit   is to carry out   proper drying and sorting.
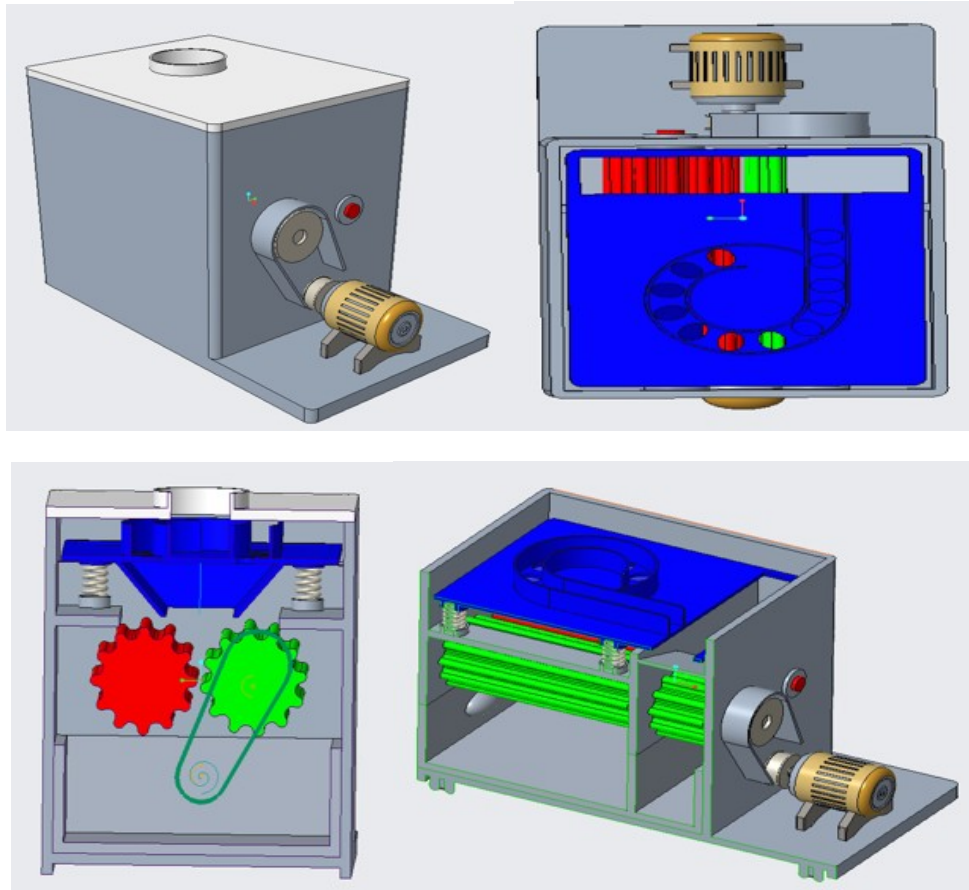
Design Details of Nutmeg separator

Team Members

| **Eldhose Raju** | **Harikrishnan A S** | **Albin Paul** | **Jipil P Chettoor** |

AGROBUY APP *Your Own Market*

Abstract

Agriculture is the primary source of livelihood for about 58 per cent of India's population. Agricultural productivity depends on several factors. These include the availability and quality of agricultural inputs such as seeds and fertilizers, assurance of remunerative prices for agricultural produce and marketing infrastructures. Poor earnings of the farmers led to the never-ending distress of the agriculture sector thus resulting in a need for introducing a national agricultural market.

For the trading of agricultural produce in an online platform, a new app called 'AGROBUY' is designed. Through this app, the farmers can post their agriculture products with image, quantity and location information. After a verification process which includes quality check, the agriculture produce is ready for sale and the shop owners or the customers can buy the product at a good price less than the market price. Massive quantities of produce can be traded through this app from anywhere around the country. Also there is a future price prediction system designed for the app so that the producers as well as the consumers can have an eye on the price variations.

This app mainly aims for the farmers to sell their agricultural produce by avoiding intermediate brokers and make them earn more than what they expect. Not only the products but also the fertilizers and manures or seeds can be afforded at a very low price by using this app. This makes the agriculture sector more secure and reliable by making the prices stable and can thus minimize the farmers' suicides.

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                          AGROBUY APP
                               |
                      STORE PREVIOUS
                       PRICES DATA
                               |
   PRODUCERS  <---  PRICE PREDICTION  --->  CONSUMERS
       |                                         |
 POST AGRICULTURE                        SEARCH AGRICULTURE
    PRODUCES                                 PRODUCES
       |                                         |
 QUALITY ASSURANCE                             BUY
       |
     SELL
```

AGROBUY APP Block Diagram

Team Members

Thomas James   **Paul Mathew**   **Melvin Shaju**   **Bencin Benny**

Beyond: Connect And Learn

Abstract

Beyond is a platform to communicate, learn and share ideas and insights between different levels of the academic community including students, teachers and colleges through a simple and efficient application. Our project is a productive yet creative environment for users where they can themselves learn a subject in a new, simpler and understandable way. With direct access to our social networking side, they can always connect to other peers or teachers during their learning to have a better understanding of the topics. We also aim to create communities that understand you and aim to teach better through our social networking side of the platform.

Team Members

Rahul Vinod   Amal Shyjo

![Viswajyothi College of Engineering & Technology logo] VISWAJYOTHI COLLEGE OF ENGINEERING & TECHNOLOGY — Approved by AICTE New Delhi & Affiliated to APJ Abdul Kalam Technological University — Vazhakulam P.O., Muvattupuzha-686 670, Kerala — Tel: 0485 2262211, 2262255, 9496335522 — Email:vjcet@vjcet.org, www.vjcet.ac.in — Established in 2001 — Managed by Catholic Diocese Kothamangalam

Amphibious Structure for Lifestocks

Abstract

India is a land of peoples who are directly and indirectly dependent on animal husbandry in a wide range from keeping a pet to large farm husbandry. Climate change and global warming is a primary concern today. Sea levels are rising gradually, along with more frequent and severe hurricanes, flooding, heavy rain and other natural disasters. Proper counter measures are required for survival in such situations in terms of architecture. People living in low lying coastal areas are more susceptible to being affected by flooding.

Disasters often occur when we are least prepared, the floods that occurred in 2018and 2019 were suitable examples for this. But from the past flood experience we have started concerns and preparation to face flood in the future. At present several measures are adopted in construction to construct flood mitigation structures.

So far studies are conducted and several measures are adopted for human safeties, but when it comes to animal safety during floods zero efforts are taken. The only option opted nowadays is to release them freely but those animals grown in closed environments surely had to face a hard time in the time. This is not only concerned about animals but a whole society dependent on them.

Our project brings out a new innovative idea named amphibious structure for livestock. Here we are adopting the idea of a pontoon based foundation which can freely lift or float over the water surface along a set of pillars. Stability of the body is attained by correction of center of gravity. This project also includes a system for hazardous time feeding and a waste management system.

AMPHIBIOUS CAGES
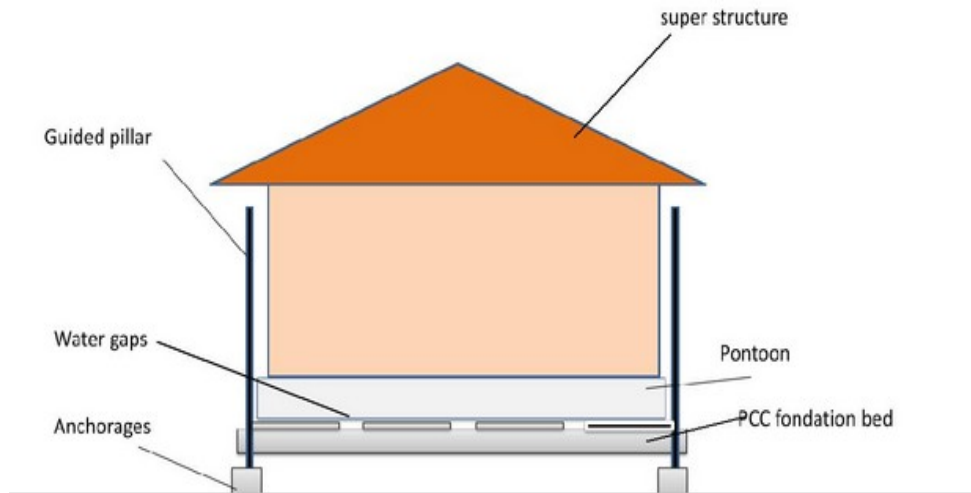
Team members

| Abhinand S | Ajwin Jose | Francis Charles | George Rahul Raj |

Mentoring Scheme

Viswajyothi College of Engineering and Technology
Innovation and Entrepreneurship Development Centre (IEDC)
Mentoring Scheme for Student Entrepreneurs

Ref: VJCET/IEDC/2019-2020/07   **Date: 02.12.2019**

As per Kerala Startup Mission guidelines, arranging interaction with entrepreneurs and creating a mentorship scheme for student entrepreneurs is one among the Functions of IEDCs in the academic institutions. Accordingly, IEDC of academic institutions shall create a pool of internal & external mentors for supporting entrepreneurs in the college. The pool shall consist of external mentors and internal mentors selected for assisting startups. The IEDC shall organize a minimum eight numbers of mentoring programs in a year.

Based on these guidelines following personalities are selected in the pool of mentors in Viswajyothi college of Engineering and technology towards effective interaction and mentoring of student entrepreneurs.

Internal Mentors

Mr. Aneesh Kurian

Assistant Professor, EEE & Entrepreneur

Area of interest : Electrical system design, Electrical Machines, Solar Plant Systems, Water Treatment Systems

E mail: aneeshpulpally@gmail.com

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Dr K K Rajan

Prof EEE & Dean IIIC

Area of interest : Core Electrical Engineering Hardware, Design, Engineering, and Manufacturing, Power system, Solar Energy

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Mr. Prince Kurian Assistant Professor, ITD Area of interest : Web Technology & Designing E mail: Princekurian2000@gmail.com Mobile : 9846952048	Dr. Sheela.V.K Assistant Professor, ITD Area of interest : Data Management & Image Processing E mail: sheelavk@vjcet.org Mobile : 9447048524
Ms. Tina Jose Assistant Professor - CE Area of Interest :Structural Engg E mail : tinatresajose@gmail.com Mobile : 9495675447	Ms. Neena M Joseph Assistant Professor - CE Area of Interest: Transportation Engg E mail : neenmariya@yahoo.co.in Mobile : 9447876078

Mr. Joe Mathew Jacob

Assistant Professor, CSE Dept, VJCET

Area of Interest : Computer Networks

joemj@vjcet.org

Mobile : 9497818504

Mr. Sivadas T Nair

Assistant Professor, CSE Dept, VJCET

Area of interest : Data Mining, Computer Architecture

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Mobile : 9447349948

Mr. Tony D

Associate Professor, ECE Dept., VJCET

Area of interest : Antenna Design

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Mobile : 9497680830

Mr. Cyriac M Odackal

Associate Professor, ECE Dept., VJCET

Area of interest : Microwave Electronics

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Mobile : 9447506638

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Mr. Vinoj K

Associate Professor, Mechanical Engineering Department

Area of interest : Production Engineering

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Mr. Arun K

Assistant Professor, Mechanical Engineering Department

Area of interest : Manufacturing Engineering

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Mobile : 9946447403

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External Mentors

External Mentors

Dr. K. C. Chandrasekharan Nair

Co-founder of Technopark Trivandrum, former CFO,Techno park and Secretary & Registrar, Technopark TBI

Area of interest : Expert in Startup Development,

Father of Startup Mission in Kerala ,

E mail: kccnair@gmail.com

Mobile : 9447111244

Mr. Manu John James

EO & Founder, Empower Engineers

Area of interest : Electrical System Design

Mobile : 9447377101

Mr. Gopikrishnan

Director, BuildNext Construction Solutions Pvt. Ltd

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Mr. Baby George, Managing director, G & G Constructions Area of interest : Urban & Regional Planning, Project planning & Management, Building Construction E mail: babygeorge.george@gmail.com Mobile : 944650117	Area of interest : Green buildings, Buildings materials, Entrepreneurship E mail: gk@buildnext.in Mobile : 7506033510A
Mr. Jaacs Job Pottas Co-Founder & CTO End to end IoT solution development, Terraconnect Pvt. Ltd Area of interest : Custom Hardware, firmware, cloud back-end and Front End design and development, IoT rule engine development, IoT framework development, working on open source technologies E mail: jaacs@terraconnect.io Mobile : 9207742587	Mr. Varghese Benny Founder and CEO, Rabbitsquare, First Floor, Karakunnel Building, Near MKNM Higher Secondary School, Kumaramangalam, Thodupuzha, Kerala 685608 Area of interest : Robotics,IoT, Cybersecurity, STEM education E mail: varghesekbenny@gmail.com Mobile : 8086967146

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Mr.Britto Saji

Co-founder and CTO

Lmntrx Tech,

Building Number II/18,

Near Karthavinpady,

Valayanchirangara Valayanchirangara P.O,

Ernakulam District,

Mazhuvannoor Panchayat,

683556

Area of interest : Android And Web application development

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Mobile : 9656382217

Mr. Sunil Kumar V

Former Managing Director, Supertech tools & Components

Area of interest : Tools & Components manufacturing

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Mobile : 9447214955

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Mr. Binol George

Founder- Recode AI

Area of interest : Machine Learning Technology

E mail: binolgeorge@gmail.com,
info@recodeai.com

Mobile : 9526977802, 8943133501

Innovation and Entrepreneurship Development Centre (IEDC)
Viswajyothi College of Engineering and Technology

Report on Major IEDC Activities

at Viswajyothi College of Engineering and Technology for the Calendar Year 2019

1.   **Orientation programs**

5.1   IEDC orientation programme for first years of   IT Branch

    An orientation class of introduction to IEDC and Startup was conducted on 1/8/2019 Afternoon at Main Auditorium. The session was handled by Mr. Ajay Basil Varghese, Nodal Officer , IEDC Cell Adishankara Institute of Science & , Kalady, Ernakulam. Mr. Ajay started the class with the need and importance of entrepreneurship. He mentioned the different straggles and measures taken by different Government agencies to boost entrepreneurship among the students. Speaker Introduced the concept of startup companies by defining startups in terms of formal definition like "A startup company is a newly formed business with particular momentum behind it

based on perceived demand for its product or service". The intention of a startup is to grow rapidly as a result of offering something that addresses a particular market gap. He also added that Entrepreneurs are frequently thought of as national assets to be cultivated, motivated, and remunerated to the greatest possible extent. Great entrepreneurs have the ability to change the way we live and work. If successful, their innovations may improve standards of living, and in addition to creating wealth with entrepreneurial ventures, they also create jobs and contribute to a growing economy.

He concluded the class by explaining the way of converting a simple idea to a business , which can be run as a startup by evaluating some ideas, which are suggested by the students. About 55 students of the first year Information Technology department were present for the session. The session was concluded by Dr. Sheela.V.K , Department coordinator and shared the various IEDC Activities of the last academic year like VJCET idea fest.

Date: 01-08-2019
Time: 2.00 pm – 4.00 pm
Venue: Classroom B 102
Number of students attended : 56

5.2   IEDC orientation programme for first years of EEE Branch

As part of first year's orientation program, a section was arranged to introduce about the innovation and entrepreneurship, Kerala Startup Mission and IEDC. Mr.Aneesh Kurian, Entrepreneur, Certified Energy Auditor and Asst. Professor, was the speaker for the occasion. He is an active Entrepreneur who founded few companies in last 10 years. Currently, he is the Founder & Managing Director of MAXENWAT, an Engineering Consultancy Services Pvt. Ltd which deals with energy management and water recycling and conservation. Earlier, he founded companies which dealt with Solar Power Plant installations and energy management consultancy.Mr.AneeshKurian also works as Assistant Professor in Viswajyothi College of Engineering & Technology, Vazhakulam. The speaker gave an account of his journey with companies he initiated. He explained and discussed with the students about the thought process,

attitude and knowledge one should possess for being a successful Entrepreneurs. Mr.AneeshKurianalso briefed about difficulties in starting a new venture and how the government establishments like Startup Missions, support such initiatives.

Mr.Jomu M George, Asst. Prof. & Dept. Coordinator IEDC VJCET, narrated the beginnings of First Startups in Kerala by College students, Startup Village, Kerala Startup Mission (KSUM), IEDC and FabLabs. He elaborated the steps being taken by the KSUM for the promotion of innovation and entrepreneurship. In conclusion, Mr.Jomu M George detailed about IEDC VJCET structure and activities, and recommended interested students to associate with IEDC and draw maximum advantage of facilities provided.

Date: 01-08-2019
Time: 2:00 pm – 4:00 pm
Venue: Classroom B 102
Number of students attended : 29

Resource Persons:
- Mr.Aneesh Kurian, Entrepreneur, Certified Energy Auditor & Asst. Professor.
- Mr.Jomu M George, Asst. Prof. & Dept. Coordinator IEDC VJCET

Mr.Aneesh Kurian, addressing the students

5.3   IEDC orientation programme for first years of ECE Branch

An orientation program was conducted for first year students (2019 admission) on 1^{st} August 2019. The programme was conducted from 1.45 pm to 4.15 pm at MBA Seminar Hall. First session was handled by Miss Gayathri Suresh, CCO, Teqnocart Innovations (Opc) Pvt. Ltd. And Mr. Shan Babu, CEO, Innovations (OPC) Pvt. Ltd. Miss. Gayathri Suresh is now doing her B Tech in Electronics And Communication Engineering at VJCET and Mr. Shan Babu is doing his B Tech in computer science Engineering at VJCET. Currently Teqnocart innovations (Opc) Pvt. Ltd has 4 employees and about 20 clients. They have provided internships to 35 students. They shared their experience of starting a company when they were doing their third semester of B Tech. With the help of Kerala Startup Mission and IEDC they started their company and it was legally registered. They described the whole procedure of starting a company and legally registering it, how to apply for funds etc. They inspired the students to come up with innovative ideas.   The second session

was handled by Mr, Jacs Job Pottas, CEO, Pot Devices and Systems. He also shared his experience of starting a company.

Date: 01-08-2019
Time: 1.45 pm to 4.15 pm
Venue: MBA Seminar Hall.
Number of students attended : 82

Miss Gayathri Suresh, CCO, TeqnocartInnovations (Opc) Pvt. Ltd. addressing students

Shri Shan Babu   CEO, Teqnocart Innovations (Opc) Pvt. Ltd Addressing Students .

Mr, Jacs Job Pottas, CEO, Pot Devices and Systems Addressing Students

5.4 IEDC orientation programme for first years of ME Branch on 01.08.2019

An orientation class of introduction to IEDC and Startup was conducted on 01-08- 2019 at Mechanical Engineering Seminar hall at 2:30 P.M. The session was handled by Mr. Junet Babu, CEO, Torq Engineering. TORQ Engineering is a mechanical engineering firm aimed at providing optimum solutions to real world engineering problems. Primarily focused on special purpose machine design and development, new product development, introduction of new production methods, the company also provides consultancy and retrofitting services to various industrial clients. He shared his experience as an entrepreneur and various scopes of the college IEDC. He also added that Entrepreneurs are frequently thought of as national assets to be cultivated, motivated, and remunerated to the greatest possible extent. Great entrepreneurs have the ability to change the way we live and work. If successful, their innovations may improve standards of living, and in addition to creating wealth with entrepreneurial ventures, they also create jobs and contribute to a growing economy. About 85 students of the first year mechanical department were present for the session. The session was concluded by Mr. Basil Baby, Department coordinator and shared the various IEDC Activities of the last academic year like VJCET idea fest.

Time: 1.45 pm to 4.15 pm

Venue: Mechanical Engineering Seminar hall

Number of students attended : 85

Mr. Junet Babu, CEO, Torqe Engineering addressing students

5.5   IEDC orientation programme for first years of   CE Branch on 02.08.2019

IEDC   Orientation program for the first-year Civil Engineering Students students, to introduce the students to the world of innovation and entrepreneurship. Mr. Gopikrishnan is the Director of BuildNext, a Startup that won DST ISBA Startup Award as Best Graduatee for their exceptional work at Kerala Startup Mission under the category: IT / Software / Apps Development / E-commerce.

Date: 01-08-2019

Time: 1.45 pm to 4.15 pm

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Venue: Civil Engineering Lecture Hall

Number of students attended : 81

Mr. Gopikrishnan is the Director of BuildNext addressing students

5.6   IEDC orientation programme for first years of   CSE Branch on 01.08.2019

An orientation class of introduction to IEDC and Startup was conducted on 1/8/2019 Afternoon at Main Auditorium. The session was handled by Mr. Ajay Basil Varghese, Nodal Officer , IEDC Cell Adishankara Institute of Science & , Kalady, Ernakulam. Mr. Ajay started the class with the need and importance of entrepreneurship. He mentioned the different straggles and measures taken by different Government agencies to boost entrepreneurship among the students. Speaker Introduced the concept of startup companies by defining startups in terms of formal definition like - "A startup company is a newly formed business with particular momentum behind it based on perceived demand for its product or service. The intention of a startup is to grow rapidly as a result of offering something that addresses a particular market gap".

He also added that Entrepreneurs are frequently thought of as national assets to be cultivated, motivated, and remunerated to the greatest possible extent. Great entrepreneurs have the ability to change the way we live and work. If successful, their innovations may improve standards of living, and in addition to creating wealth with entrepreneurial ventures, they also create jobs and contribute to a growing economy. He concluded the class by explaining ,the way of converting a

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simple idea to a business , which can be run as startup by evaluating some idea, which are suggested by the students.

Mr. Ajay Basil Varghese, Nodal Officer , Adhi Sanakra Addressing the Students

About 120 students of the first year Computer Science department was present for the session. The session was concluded by Rini Simon , Department coordinator and shared the various IEDC Activities of the last academic year like VJCET idea fest.

Date: 01-08-2019
Time: 1.45 pm to 4.15 pm
Venue: Main Auditorium
Number of students attended :120

5.7   Orientation programme for IEDC members of VJCET

Innovation and Entrepreneurship Development Centre is being promoted in educational institutions to develop institutional mechanisms to create entrepreneurial culture in Science and Technology   academic institutions**.** IEDC coordination committee in VJCET for 2019-20 academic year was formed on 28.08.2019. In the meeting of the VJCET IEDC coordination committee held on 04.10.2019 it was decided to conduct an orientation programme for all members of IEDC in VJCET. As an orientation programme was already conducted for first year

students, the focus can be on members from other classes. Accordingly the orientation programme was organized on Friday 11.10.2019 at R & D seminar hall. To create awareness about IEDC, its objectives, functions, current activities and to give an indication to the coordination committee members about their duties and responsibilities. Dr K K Rajan Prof EEE and Nodal officer made a powerpoint presentation on the topic " An Introduction To Innovation and Entrepreneurship Development Centre" . The programme started at 1.45 PM. The power point presentation covered in detail sub topics such as Mission of IEDC, IEDCs In Kerala, KSUM Guidelines, Objectives of the IEDCs, Functions of IEDCs, IEDC Management,   IEDC Documentation,   IEDC Reporting to KSUM, IEDC in VJCET, Activities of IEDC, Idea Fest 2019 and 2020, Innovation Grant Guidelines and Viswajyothi Business Incubation Centre (V-BIC). Around 100 students from different classes attended the programme. The programme was interactive and students raised many questions during the talk. Dr V K Sheela , IEDC coordinator, IT department and Shri Jomu George IEDC coordinator EEE department attended the meeting. Dr K K Rajan introduced the coordination committee members to the participants. This orientation programme was very useful to the students and they got an idea about the activities of IEDC in VJCET and also got guidance on how to proceed with their innovative ideas. The programme was over by 2.45 PM. Basil Eldhose, CEO, IEDC, proposed a vote of thanks to the speaker and the participants.

Date: 11-10-2019
Time: 1.45 pm to 2.45 pm
Venue: R & D Seminar Hall
Number of students attended : 71

Dr K K Rajan Nodal officer IEDC Delivering the Talk

2. Workshops

6.1 Workshop on exploring the Potential of Entrepreneurship & Introduction to M/s Teqnocart

The workshop conducted by IEDC, VJCET on 15 November was about the topic 'Exploring the potential of entrepreneurship and introduction to Teqnocart'. The workshop was conducted in an intention to provide the students an ideal opportunity to delve deep into the vast possibilities of entrepreneurship, motivational factors, resources, entrepreneurial abilities and explore the immense potential of entrepreneurship. This was an ample platform to learn and understand the key features of entrepreneurship along with a brief introduction to Teqnocart, one of the success stories of S5 Viswajyothians. The objective of conducting such a workshop is to develop and mould young entrepreneurs and to invite the students who have innovative ideas into the real world of entrepreneurship. Also, it is intended to make students familiar with KSUM, the idea grants, and helps KSUM provide the young entrepreneurs. Behind this, the workshop aims at introducing Teqnocart, one of the startups from S5 students of our college. The workshop had begun by 12 pm with a warm welcome speech by Mr. Sanoj Saju. This event was divided into 3 sections. First section was handled by Ms. Gayathri Suresh, COO, IEDC and CFO, Teqnocart Innovations. This section describes what entrepreneurship is, the importance of entrepreneurship and the story of Teqnocart. The next section was taken by Mr. Shan Babu, CEO, Teqnocart

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Innovations which enabled students to get a brief knowledge about KSUM, idea grants, steps to register a startup and different types of companies. The next section was handed over to Mr. Jetson Joseph. This last section described Edu-Tech, an educational platform from Teqnocart which provides internships, project guidance, workshops and seminars.

Date: 15-11-2019

Time: 12 pm to 4.15 pm

Venue: R & D Seminar Hall

Number of students attended :30

CEO M/s Teqnocart Addressing Students

2.2   Workshop on Data Science

Understanding the need of Data Science in this century, the IEDC and the department of Information Technology organized a workshop on Data Science on Wednesday 16.10.2019 at R & D seminar hall. Mr. Abhilash Pradeep and Mrs. Merin Abraham from M/s Spectrum Kochi were the resource persons.

Date: 16-10-2019

Time: 9.30 am to 4.15 pm

Venue: R & D Seminar Hall

Number of students attended :49

Participants of workshop with IEDC office bearers

3.   Conclusion

Major activities of IEDC of Viswajyothi College of Engineering and Technology are summarized and even details are provided as desired by IEDC coordinator, KSUM. All the details of these activities are also available/uploaded   at the KSUM website the IEDC Accreditation Platform https://iedc.startupmission.in/#/event.

Innovation and Entrepreneurship Development Centre
(IEDC)
Viswajyothi College of Engineering and Technology

Report on Major IEDC Activities at Viswajyothi College of Engineering and Technology for the Financial Year 2020 - 2021

Summary report IEDC Activates during Academic year March 2020 to December 2020

No.	Name of Activity	Title/Topic	Date of commences	Organized by/ Organizers	Resource Person	Mode
1	Webinar	Entrepreneurship an attractive option in post Covid era	21/08/2020	Organized by IEDC – VJCET Mr. Vinoj .K	Er. Joseph .T. Cyriac Propritor -JOCYT PRECOMP & Managing partner – JOCYT AEROSPACE	Online
2	Webinar	How to file national and international patents	17/09/2020	Organized by IEDC – VJCET Mr. Vinoj .K & Dr. Anishin Raj.M.M	Mr. Hariprakash Govindarajalu CTO- Logic Research Labs,	Senior software Engineer (Sun Microsystems, HCL and VMware)	Online
3	Webinar	How to frame startUp policy	21/11/2020	Organized by IEDC – VJCET Mr. Vinoj .K & Dr. Anishin Raj.M.M	Mr. Gautham Founder & Director Pupilfirst	Online
4	Orientation Programme	IEDC Orientation Programme for first year students	15/12/2020	Organized by IEDC –	Mr. Ajay Basil Varghese, Nodal officer , AISAT,	Online

		(AI, IT and ECE Branches)		VJCET Dr. Sheela V. K., Ms. Femy John	Business Incubator and co-founder, vooxo labs	
5	Orientation Programme	IEDC Orientation Programme for first year students (CE, ME and EEE Branches)	17/12/2020	Organized by IEDC – VJCET Mr. Jomu. M George, Ms. Nivya mary Abraham, Mr. Basil Baby	Mr. Sherin Sam Jose CEO , Startups Valley Amal Jyothi , TBI , HoD, ME department, Amal Jyothi College of Engineering	Online
6	Orientation Programme	IEDC Orientation Programme for first year students (CS Branch)	22/12/2020	Organized by IEDC – VJCET Mrs Rini SImon	Prof. Jiby Varghese, Executive Director, UKF Engineering College	Online

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REPORT - WEBINAR On

ENTREPRENEURSHIP-AN ATTRACTIVE OPTION IN POST COVID ERA

Date: 25/08/2020

On 21st August 2020, a live webinar was organised by IEDC in association with R&D, VJCET. This auspicious event commenced at 3 pm.
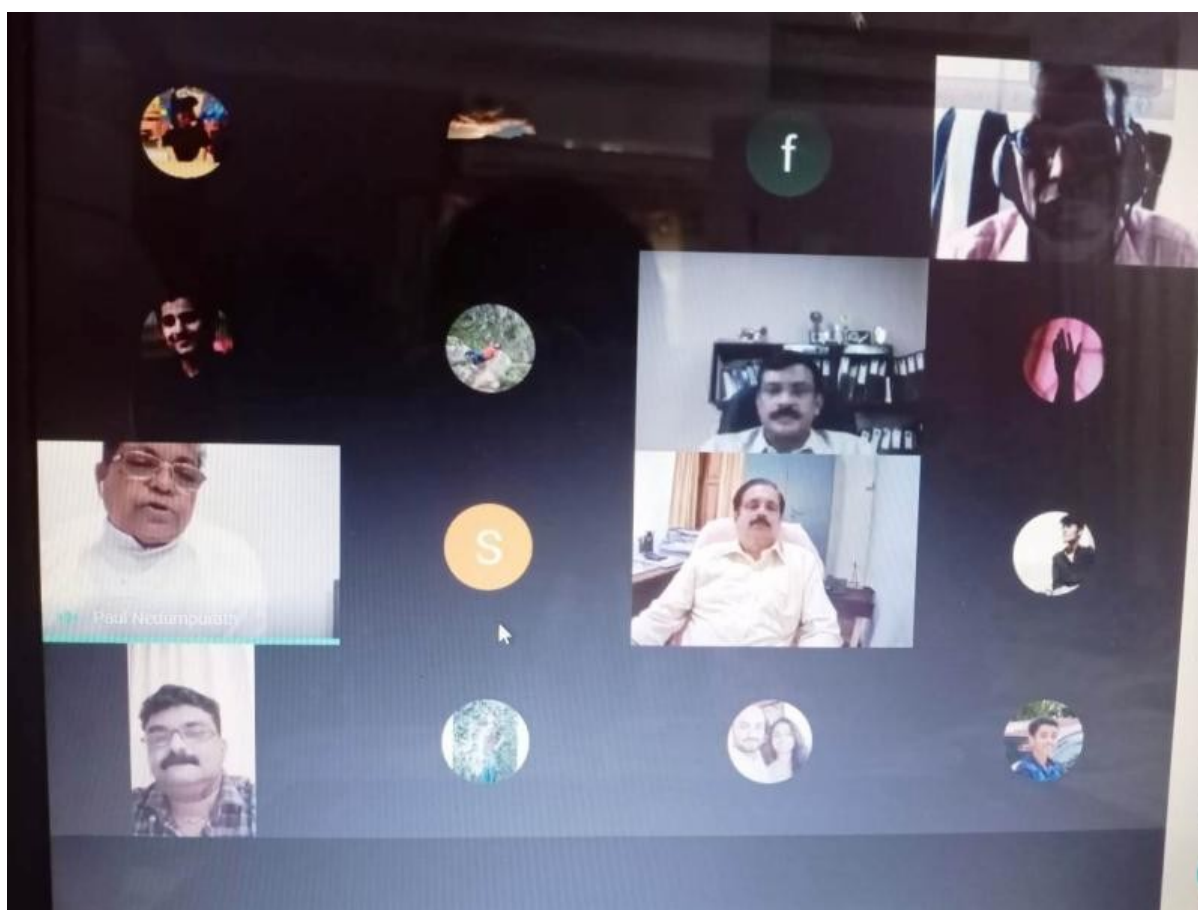
The event started with a prayer. It was followed by the welcome speech delivered by the IEDC Nodal officer Mr. Vinoj.K. Fr. Paul Nedumpurath , Director, Viswajyothi College of Engineering & Technology, initially he appreciated the event and the importance of the topics in the webinar. In his speech he added about the impact of COVID 19 and also expressed his joy in the growth in the field of entrepreneurship . Dr K.K Rajan, Principal Felicitated the gathering with his energetic

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words, in his speech he mentioned the importance of IEDC in the future and also encouraged the gathering to attend the webinar with great interest

The event was graced by our the chief guest of the day Er.Joseph T Cyriac the proprietor of JOCYT PRECOMP and managing Partner of JOCYT Aerospace,

It was a successful and fruitful event which was about entrepreneurship being an attractive option after this pandemic situation caused by novel coronavirus. Even in this difficult situation where the education and works are being done through online, IEDC VJCET was able to host such a wonderful event for the budding entrepreneurs and engineers which was attended by around 209 participants which made this event a grand success. Various discussions on this topic followed. He talked about the connections between ideas and concepts across different disciplinary boundaries. Explained the ways that can apply the knowledge gained in one discipline to another different discipline. He encouraged the students to develop knowledge, insights, problem solving skills, self-confidence, self-efficacy, and make a passion for self-employment. There was also an interactive of questions and answers towards the end of the webinar which made it livelier.

The meet ended with a vote of thanks to the chief guest of the day and other dignitaries, teachers, students and other participants. The event was a huge success.

6. REPORT - WEBINAR HOW TO FILE NATIONAL AND INTERNATIONAL PATENT

Date: 17/10/2020

● **Introduction**

The webinar was organized by IIIC in association with Innovation and Entrepreneurship Development Centre (IEDC) and Research and Development (R&D) of VJCET on 17th October 2020.The topic of this webinar was "**How to file National and International Patent**". The webinar was conducted with an intention to know what are the norms and procedures that one should follow in filing a patent both at national and international level.

Screenshot of the event
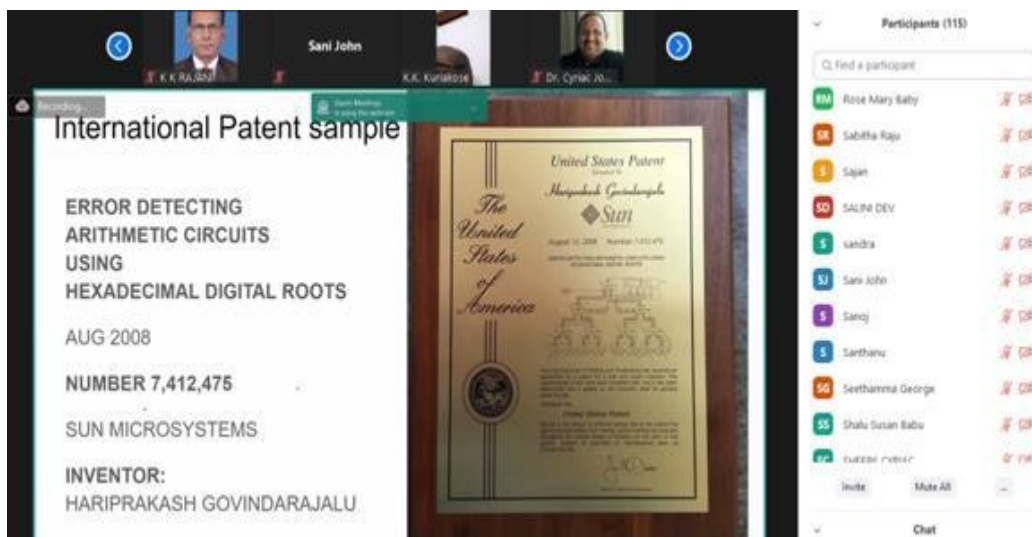
Screenshot of the event

● **Program Objective**

The quantitative measure of research and development activities in an institution is in the number of publications and patents. From this webinar participants will get an idea on what sort of research findings are required to file patents. Also,the procedures that a researcher should

follow in filing a patent will be clearly delivered in this webinar

● **Program Description**

For this webinar a zoom meeting was scheduled. The webinar started at 2.00pm with a warm welcome speech by Mr Vinoj K, Convener IIIC and IEDC. Dr.AnishinRaj M M Dean, R&D introduced the chief guest Mr. Hariprakash Govindarajalu, Chief Technology Officer, Logic Research Labs. Eminent personalities including Patent Attorney Advocate Jayaprakash, Mr.Varadharajan Ramachandran Senior member IEEE, Dr B Parthipan, Structural engineer and Dr. Prakash, Mechanical engineer also joined in this webinar. Rev. Fr. Paul Nedumpurath, Director of the college blessed this webinar with a message. Principal Dr K K Rajan through his felicitation conveyed the need of filing patents. Mr. Hariprakash Govindarajalu gave an idea on various milestones he covered during his journey of filing a patent starting from scratch. Mr.Varadarajan Ramachandran an electronics engineer gave us an insight on how he filed patent on aircraft clearance enforcement. The methodology suggested by him was to identify a theme to innovate, make a group of likeminded people and search for problems to be confirmed from authenticate sources to check marketability. Mr.B Parthiban talked about the details of documents that one should submit for the filing purpose. Mr. Prakash conveyed that solving complex problems can lead to inventions of more than one patent. Mr. Jayaprakash, patent lawyer, clearly explained the procedure for filing a patent including two types of applications for filing patents.

● **Program outcome**

In this webinar the procedure for patent filing was clearly explained from the experiences of each resource person. Participants also got an opportunity to interact with the resource persons from various field

● **Conclusion**

The webinar concluded at 5:00 pm with a vote of Dr AnishinRaj M M Dean, R&D. For this webinar 93 participants including staff and students from various departments had participated. E-certificate was provided to all participants.

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LIST OF PARTICIPANTS FOR WEBINAR ON **"HOW TO FILE NATIONAL AND INTERNATIONAL PATENT**

Sl no	Name	Designation	Department
1	Abin paul	Assistant professor	ME
2	Ajai c harish	Student	S3 CSE A
3	Alphonsa kuriakose	Asst. Prof	CSE
4	Amal chandran	Student	S8 EC B
5	Amal chandran	Student	S8
6	Amel austine	Hod	CSE
7	Andrews jose	Assistant professor	CSE
8	Anish m jose	Assistant professor	ECE
9	Anitta thomas	Assistant professor	ECE
10	Anjana s	Student	S8 ECA
11	Ann preetha jose	Assistant professor	IT
12	Anoop c k	Professor	CE
13	Anu c kunjachan	Assistant professor	ECE
14	Anu jose	Assistant professor	CSE
15	Anu paul	Assistant professor	CE
16	Arsha j k	Assistant professor	CSE
17	Arun raphel	Assistant professor	ME
18	Ashique a m	Student	S3 CSA
19	Ashly jacob	Assistant professor	S&H
20	Bency cleetus	Assistant professor	CSE
21	Bijimol joseph	Assistant professor	CE
22	Celiya saju	Student	S3 EC A

23	Chandini binu	Student	S8 EC A
24	Cinita mary mathew	Assistant professor	CSE
25	Cuckoo anitha joseph	Assistant professor	ECE
26	Dany sebastian	Assistant professor	S&H
27	Deenu baby	Assistant professor	S& H
28	Devina vipinan	Assistant professor	CE
29	Diana baby	Assistant professor	IT
30	Dileep kumar p	Assistant professor	EEE
31	Dona jose	Assistant professor	CSE
32	Dr.sheela.v.k	Associate professor	IT
33	Eldhose kurian	Assistant professor	ME
34	Femil francis	Student	S3 CSA
35	Finu john	Assistant professor	CE
36	Frenosh k francis	Assistant professor	ME
37	George martin	Student	S5 ME B
38	Govind v shenoy	Student	S7 CSB
39	Hintathampi	Assistant professor	CE
40	Jephin baby	Student	S8 ECE
41	Jetson joseph	Student	S7 CS B
42	Jithin babu	Student	S7 CSB
43	Joann p bernard	Student	S8 ECE A
44	Jobin jose	Assistant professor	CSE
45	Joicy k jose	2nd grade instructor	CSE
46	Jomu m george	Assistant professor	EEE

47	Joseph benny	Student	S7 CSB
48	Juliet a murali	Asst. Prof	IT
49	K.k.kuriakosr	Professor	CSE
50	Lovin varghese	Assistant professor	ME
51	Manoj francis	Assistant professor	CSE
52	Manoj francis	Computer programmer	CSE
53	Manu jose	Assistant professor	ECE
54	Mary nirmala george	Assistant professor	ECE
55	Mili els jose	Assistant professor	CSE
56	Minu c joy	Assistant professor	CE
57	Mithun murali krishna	Student	S8 EC A
58	Ms. Jerin jose	Assistant professor	CE
59	Neenu daniel	Assistant professor	CSE
60	Neethu joseph	Computer programmer	CSE
61	Nidheesh k	Asst. Prof	ME
62	Nidheesh k	Assistant professor	ME
63	Niji mathews	Assistant professor	ECE
64	Niji mathews	Assistant professor	ECE
65	Nimmy george	Assistant professor	CSE
66	Nivya mary abraham	Assistant professor	CE
67	Prince kurian	Asst.prof,	IT
68	Rahul j	Student	S7 CSE B
69	Rakesh jose	Assistant professor	ME
70	Ranjini surendran	Associate professor	ECE

|			
71	Remya paul	Assistant professor	CSE
72	Ritty jacob	Assistant professor	CSE
73	Robin k augustine	Assistant professor	S&H
74	Rose maria jose	Assistant professor	ECE
75	Sabitha raju	Assistant professor	CSE
76	Salini dev p v	Assistant professor	IT
77	Sani john	Assistant professor	ECE
78	Seena paul	Assistant professor	ECE
79	Shalu susan babu	Student	S3 EC A
80	Sidharth t.s	Student	S5 ME B
81	Silpa joseph	Associate professor	CSE
82	Sindhu jose	Assistant professor	CSE
83	Smitha cyriac	Assistant professor	ECE
84	Sneha sunny	Student	S8 ECE A
85	Somy p mathew	Vice principal	Vice principal
86	Tina jose	Assistant professor	CE
87	Tina jose	Assistant professor	CE
88	Tiny molly v	Assistant professor	IT
89	Tony d	Associate professor	ECE
90	Vinija kurian	Assistant professor	ECE
91	Vinoj k	Associate prof	ME
92	Vishnu m	Student	S8 ECE B
93	Vishnu raju	Student	S5 ME B

# 7. REPORT - WEBINAR On "How to Frame Start-Up Policy"?

Date: 21/11/2020

7. Introduction

The webinar was organized by National Innovation and Start-up Policy (NISP), Centre for research and development(R&D), innovation and entrepreneurship development centre(IEDC) and industry institute interaction cell (IIIC) on 21st November 2020.The topic of the webinar was "How to frame a startup policy". The webinar was conducted with an intention to help faculty members of various innovation cells to frame a startup policy for the college.
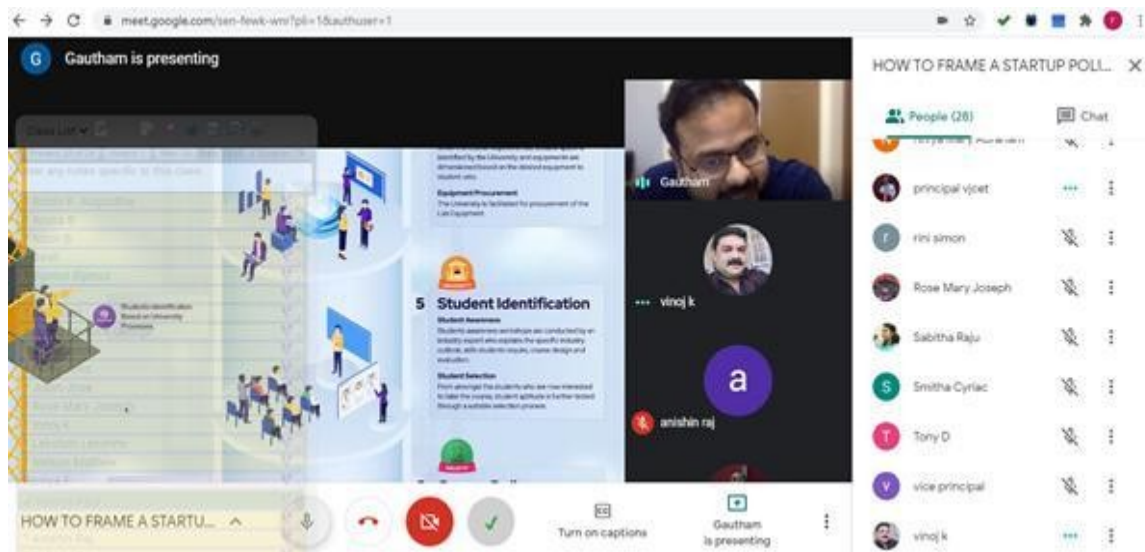
Screenshot of the event
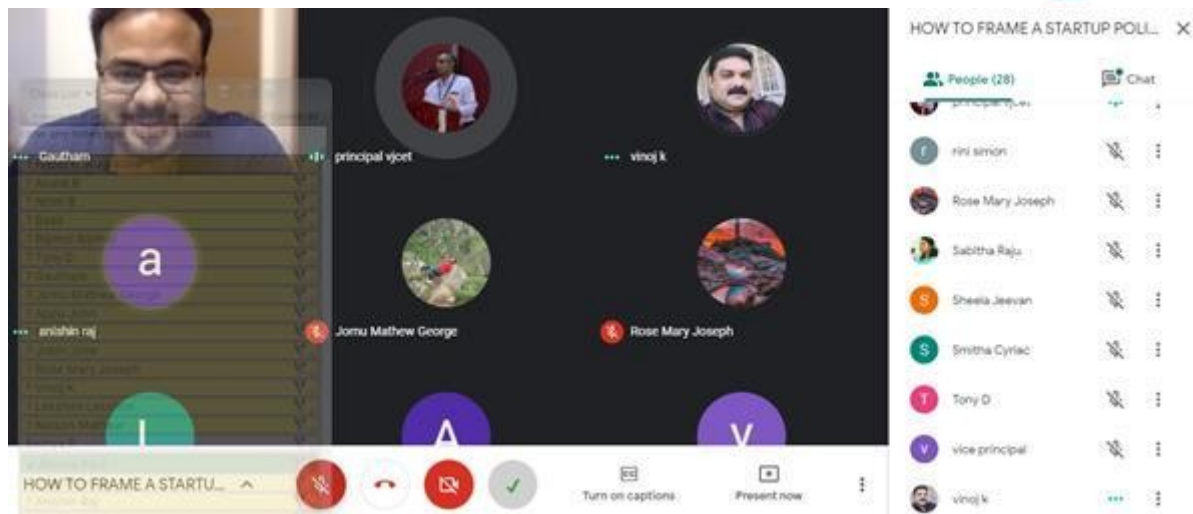
Screenshot of the Event

2.Program Objective

From the direction from All India Council of Technical Education (AICTE) various measures need to be taken inculcate innovations and entrepreneurial culture in colleges need to be taken.The main objective of this webinar is to get guidelines for framing a startup policy and to know how to improve entrepreneurial skills and abilities among students

3. Program Description

For this webinar a google meet was scheduled. The webinar started at 4.00pm with a warm welcome speech by Dr AnishinRaj M M, DEAN R&D. He introduced the chief guest Mr. Gauthaum, Founder and Director Pupil First. Principal Dr K K Rajan through his felicitation conveyed the need of framing a start-up policy in an institution. Mr. Gautham appreciated the startup policy drafted by the faculty members. He was also told to look for various funding options i.e. from AICTE, Kerala startup mission for entrepreneurial activities in the college. He suggested that for increasing entrepreneurial activities, first identify brighter students and create a student pool. And collaboration of industry experts with student's pool can improve entrepreneurial skills and abilities among students. Alumni can also contribute to enhance the skills in students

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4.Program Outcome

The webinar has given clear guidelines on how to frame a startup policy. The speaker also shared his ideas of enhancing the entrepreneurial skills and abilities in students

5. Conclusion

26 faculty members who are part of various innovation cells had participated in this webinar. The webinar concluded at 5:00 pm with a vote of thanks by Mrs. Remya Paul, IIIC-CSE department in charge.

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8. REPORT ON IEDC - ORIENTATION PROGRAMME for AI, ECE & IT Branches

Date :15/12/2020

1. Introduction

An IEDC Orientation Programme for first year students of AI, ECE, IT Branches was conducted on 15th December 2020. The Talk was conducted to provide a basic awareness about the functioning of IEDC and initiatives taken by Kerala Start-up Mission to encourage and motivate young entrepreneurs.
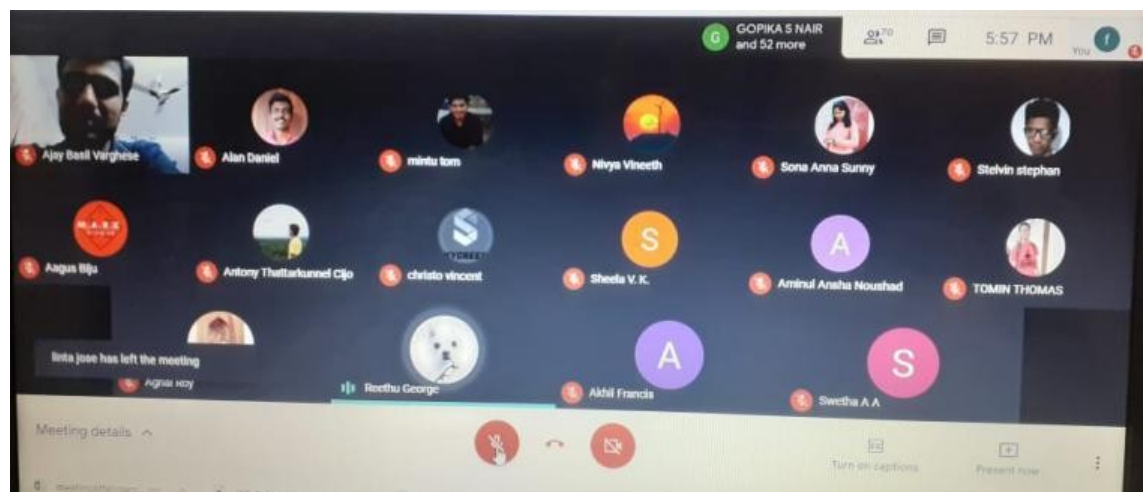
Screenshot of the event

2. Program Objective

The objective of conducting such a workshop is to develop and mould young entrepreneurs and to invite the students who have innovative ideas into the real world of entrepreneurship. Also, it is intended to make students familiar with KSUM, the idea grants help that KSUM provides to the young entrepreneurs.

3. Program Description

An IEDC orientation programme was held at 4:30 pm though Zoom on 15th December 2020 for the first year AI,ECE & IT students. Our resource person was Mr.Ajay Basil Varghese, Nodal officer,Adi Shankara Technology Business Incubator and Co-founder Vooxo labs. The programme began with a welcome speech and introduction about the resource person given by Ms. Femy John, IEDC staff coordinator, ECE Dept.

Mr. Ajay Basil Varghese introduced himself as an alumni of VJCET. Further in the session, he interacted with the participants about their knowledge on different innovative ideas. Mr Ajay Basil explained about how different people came up with different innovations and how they earned their patents including that of the coconut scraper. He also shared information on how to come up with an innovative idea, how to bring it to reality and how to earn a patent over our idea and protect it .The talk went on with the topic entrepreneurship through which he explained about how to get financial assistance from different sources for our innovation. The NUNS (Novelty,Utility,Non-abusiveness,Statutory subject matter) test which makes innovations worthy for a patent was explained with examples.

The workshop was concluded by 6.30 pm with a vote of thanks which was delivered by Dr. Sheela V. K., IEDC staff coordinator, IT Dept.

4. Program Outcomes

The Orientation Programme was truly a motivation for the students. It helped a lot to know about the processes of registration, funding, things that should be kept in the mind of each aspirant who have innovative ideas and keen to enter into the world of entrepreneurship.

5. Conclusion

The students could gain knowledge about the functioning of IEDC.

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Table 1. List of Participants

Sl No.	Name	Branch
1	Amy Cherian	ECE
2	Jeswin Antony M	IT
3	Aminul Ansha Noushad	ECE
4	STELVIN STEPHAN	ECE
5	lakshmi jayakumar	ECE
6	Nivya Vineeth	AI
7	Aleena Jibin	ECE
8	Sethulakshmi Sunil	MBA
9	Noel Johnson	ECE
10	Jifi Jimmy	ECE
11	lakshmi jayakumar	ECE
12	Jifi Jimmy	ECE
13	ATHIRA SUSAN SABU	AI
14	Agnal Roy	IT
15	Judith biju	IT
16	Gopika s nair	ECE
17	Basil Baiju	IT
18	JOANA ELSUM MANUEL	IT
19	Irine Ani	IT
20	Alan Daniel	MBA
21	Abhishek Joy	ECE
22	ANU BABY	IT
23	Gopika S Nair	ECE
24	lakshmi jayakumar	ECE
25	Chandana Sajeev	ECE
26	Anand P Sasidharan	IT
27	christo vincent	AI
28	Nihal Thomas	AI
29	Abin Antony	AI
30	Bharath N	AI
31	aksa ann glemin	AI
32	Sivapriya v jayan	IT
33	NOVA EMMANUEL	AI
34	Akhil Francis	MBA
35	sona anna sunny	MBA
36	ANUMOLNS	MBA
37	John Mathew	IT

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38	P B SRUTHY	IT
39	Krishnanand s	IT
40	Romal Joseph	IT
41	Mintu Tom	MBA
42	REETHU GEORGE	AI
43	Aagus Biju	IT
44	Good programe	IT
45	Annmary Cecil	MBA
46	John Mathew	IT
47	Aina Shibu	IT
48	Jeevika sojan	AI
49	Rilu Tojo	IT
50	KARTHIK	IT
51	Aleena Biju	IT
52	Alan Sajo Paul	IT
53	Sruthy Das	MBA
54	Josna Joseph	IT
55	TOMIN THOMAS	ECE
56	Michael Raju	IT
57	Nikhil	IT
58	Athul asok	AI
59	Pious Raju	IT
60	Riya Vincent	IT
61	Antony Cijo	IT

9. REPORT ON IEDC - ORIENTATION PROGRAMME for CE, ME & EEE Branches

Date :17/12/2020

1. Introduction

As part of first year's orientation program, a section was arranged to introduce about the innovation and entrepreneurship, and Innovation and Entrepreneurship Development Cell (IEDC) to fresher students in Civil Engineering, Electrical & Electronics Engineering, and Mechanical Engineering,

Mr. Sherin Sam Jose, CEO, Startups Valley Amal Jyothi TBI was the speaker for the occasion. He is a prominent person with well experience with activities related to Technical Business Incubators,

IEDC, Kerala Startup Mission, and other Entrepreneurship related organizations. He is also responsible for handling well-funded projects in relation with incubation of Startups.

2. Program Objective

The objective of conducting such a workshop is to develop and mould young entrepreneurs and to invite the students who have innovative ideas into the real world of entrepreneurship. Also, it is intended to make students familiar with KSUM, the idea grants help that KSUM provides to young entrepreneurs.

3. Program Description

The programme was started at 5pm on Google meet platform with welcome speech and introduction of Speaker by Ms. Devika Sunil.

The speaker gave an account of journeys of companies such as Nallakeerai, Fresh-to-Home, etc that started with remarkably simple ideas. He explained and discussed with the students about the thought process and attitude one should possess for being a successful Entrepreneurs. In addition,

Mr. Sherin Sam Jose shared his experience of working with students who started startups either successful or failed, and mentioned how important it is to learn from others experiences while developing an idea into a marketable product or service.

71 participants attended the programme including VJCET IEDC Nodal officer and department faculty coordinators.
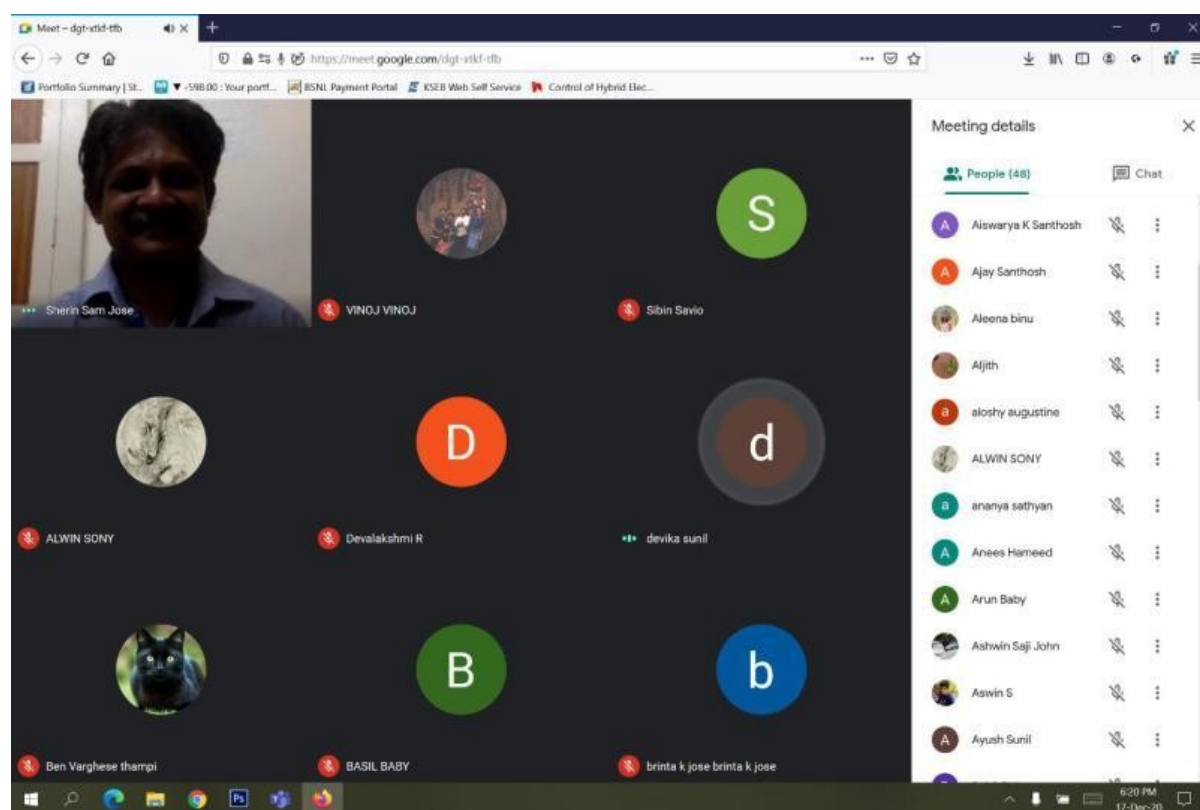
![Viswajyothi College of Engineering & Technology logo] Vazhakulam P.O., Muvattupuzha-686 670, Kerala
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Established in 2001
Managed by Catholic Diocese Kothamangalam

4. Program Outcomes

This workshop was truly a motivation for the students. It helped a lot to know about the processes of registration, funding, things that should be kept in the mind of each aspirant who have innovative

ideas and keen to enter into the world of entrepreneurship

5. Conclusion

The workshop was wound up by 6.30 pm by the vote of thanks delivered by Ms. Devika Sunil.

10.   REPORT ON IEDC ORIENTATION PROGRAMME FOR CSE

Date :17/12/2020

1. Introduction

An IEDC Orientation Programme for first year students for CSE Branch was conducted on 22nd December 2020. The Talk was conducted to provide a basic awareness about the functioning of IEDC and initiatives taken by Kerala Start-up Mission to encourage and motivate young entrepreneurs.
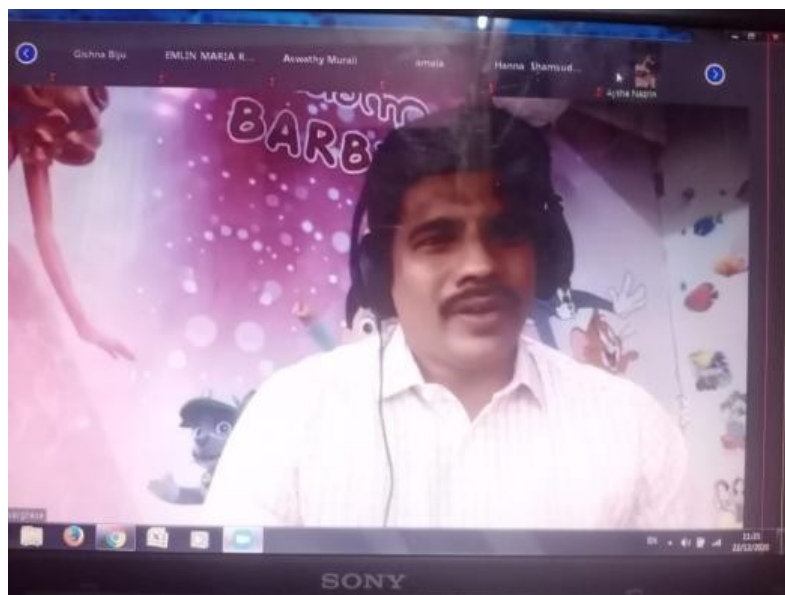
Screenshot of the event

2. Program Objective

The objective of conducting such a workshop is to develop and mould young entrepreneurs and to invite the students who have innovative ideas into the real world of entrepreneurship.

3. Program Description

An IEDC orientation programme was held at 11:00 AM through Zoom on 22nd December 2020 for the first year CSE students. Our resource person was Prof. Jiby Varghese, Executive Director, UKF College. The programme began with a welcome speech and introduction about the resource person given by Mrs. Rini Simon, IEDC staff coordinator, CSE Department.

The role of IEDC in a college is to inculcate Innovative and entrepreneurship culture in a college. It teaches students to think differently and innovatively. Helps students to convert normal ideas into innovative ideas and even find innovative elements in those ideas. The main motive of the Internship and Entrepreneurship Development Cell is to provide mentorship to students with innovative ideas and capabilities.

For a successful startup, the speaker listed the first few tasks that should be done by the first-year students which are - Gather and sort out ideas, find the innovative element, make potential groups and discuss its Social impact, Novelty and Feasibility. In the end, the speaker inspired the students by sharing his innovative ideas and successful works.

The workshop was concluded by 12.00 pm with a vote of thanks which was delivered by Miss Aysha Nazrin Afsai, (S1 CSE A).

4. Program Outcomes

The Orientation Programme was truly a motivation for the students. It helped a lot to know about the processes of registration, funding, things that should be kept in the mind of each aspirant who have innovative ideas and keen to enter into the world of entrepreneurship.

5. Conclusion

The students could gain knowledge about the functioning of IEDC.