

# **Toc H Institute of Science & Technology**

## **IEDC-Activities-2017**

### **Fab Lab visit-27.01.2017**

Fab Lab Visit for Computer science students arranged on 27<sup>th</sup> Jan 2017. Fifty two students and three faculty members were there in the group. The students got the opportunity to experience the technical prototyping platform for learning and innovation.

A small interactive workshop was also handled by Mr.Lancy Felix, (Startup fellow) which offered digital fabrication and empowered the users to create smart devices for themselves.

Students had the first time hands on learning on Laser cutter, CNC Mill, 3D printers, Vinyl plotter, Sand blaster, Testing equipments etc.





### **Tech FOSS 17.02.2017**

IEDC–TIST jointly with The Department of Computer Science and Engineering of Toc H Institute of Science and Technology, Arakkunnam, in association with the Computer Society of India (CSI), organized a two day intercollegiate technical event ‘TECH FOSS 2K17’ on 17th & 18th February 2017. The mission is to promote the virtues of free software and to increase the awareness among the young generation regarding how each one can contribute to the open source arena.

The chief guest of the day was Mr. Sijo Kuruvilla George, Founding CEO @ Startup Village. He officially declared the launch of the two days program and delivered the keynote address on ‘Entrepreneurship and Challenges’. He shared his experiences as a mentor for many innovative talents from

engineering colleges. He narrated the success stories of young entrepreneurs, Mr. Jibin Jose and Mr. Aravind Sanjeev, who are the alumni of TIST. The talk proved to be very motivational for the students for taking up initiatives

### **MAKER EXPO 17.02.2017 & 18.02.2017**

TIST- IEDC organised the Maker Expo which proved to be a venue to showcase technical expertise of young aspirants in the fields of science and technology. It was an attempt to map and empower a community of educators and creative people who share a passion to innovate, evolve and change the learning landscape.

Amid a series of interesting experimental works by engineering and science graduates on display, mechanical robotic models by an illiterate gold smith particularly attracted the visitors. The exhibits included projects like Drone, Friska Water Cooler, Solar Lamp, Music system from Scrap, Holographic projector from mobile video, Talking Robot, Blood circulation checking equipment, Wiky Robot, Micro Second measuring system, Measuring gauge etc. There was a live demo of 3D Printing Technology by Maker Bot. There was a live Quad copter flight show, dancing robot show and hover board demo. Mr. Akhil, a robotic expert, conducted a hands-on session on “How to build a drone in 45 minutes?” using the drone kit. Maker expo witnessed enthusiastic participation from more than 500 students, including external college participants

### **WORKSHOPS on ANDROID, RUBY, WEB DEVELOPMENT, PYTHON, DJANGO 17<sup>th</sup> and 18<sup>th</sup> February 2017**

#### **ANDROID–**

IEDC organised Two days hands-on workshop on Android conducted by Mr. Jerin A Mathews from Rectify Technology Solutions. There were 35 participants, including 11 external participants from different engineering colleges across Kerala. The workshop started with the basics of Android, and had hands on training on app making.

The session proved to be useful in helping students to get hands on experience on mobile app development. The workshop ended up with a surprise contest ‘My First App Challenge’. Mr. Syamkumar A S of Mar

Baselios Institute Of Technology and Science [MBITS], Kothamangalam, secured the prize for 'Currency Converter' App.

### **RUBY ON RAILS WEB DEVELOPMENT WORKSHOP-**

Two days Ruby workshop was conducted by Mr. Roshan Jossey and Mr. Muralikrishna, enthusiasts from Kerala Ruby Group. Learning to build a modern web application is made much easier and more fun with Ruby on Rails. It includes everything a beginner need to build fantastic applications. Ruby on Rails is open source software, so not only is it free to use, people can also help make it better. More than 4,500 people already have contributed code to Rails and the workshop may help the participants to become one of them. The workshop covered web development using Ruby and exemplified with GIT Hub, that will help moving the right direction in the web development process.

### **PYTHON/DJANGO WORKSHOP-**

Two-day hands-on workshop on Web application development using Python/Django framework was conducted by Mr. Jibin Jose, an enthusiast from Kochi Python Community. Django is a high-level Python Web framework that encourages rapid web development and clean, pragmatic design. Built by experienced developers, it takes care of much of the hassle of Web development, so users can focus on writing their app without needing to reinvent the wheel. It's free and open source. The workshop was designed to provide an enjoyable experience to everyone with Python programming language and it provided an amazing opportunity to shape the future with most demanding Skills. Kochi Python is a small group of enthusiastic python programmers, who conducts meet ups, workshops, and forums to promote Python and computing.

There were 93 participants for the workshops, including 15 external participants from other colleges and schools across Kerala, and they found the sessions immensely useful.

### **Smart India Hackathon @ Ahmadabad on 1<sup>st</sup> & 2<sup>nd</sup> April 2017**

Smart India Hackathon'17 was an all India 36 hour nonstop digital programming competition from across 33 locations in India to offer digital yet sustainable innovative solutions to solve real time challenges faced by

the nation. With the aim and vision that the young minds are the nation's future, it was held on 1<sup>ST</sup> and 2<sup>ND</sup> April 2017.

The selection process started early by the mid of 2016. From the received 7K projects ranging into each ministry, a thousand of the best project ideas were selected for the finals. Our team "Dream Creators" were among the lucky 1000 teams to go out of the state to compete in the finals held at Gujarat under the ministry of ISRO.

The team of six IEDC Student Members – Alma T A (Team Leader), Rajeev P R, Vysakh T S, Anjana John from ECE S6 batch, Siddharth Prajosh CS S6 and Yadev Jayachandran CS S2 headed to Ahmedabad on 29<sup>th</sup> March to be at the finals of India's biggest Digital movement. The team was mentored by Sohil Patel, CTO at Oizom, an IoT company centered at Ahmedabad.

Their idea was to build a live security system for ISRO labs and secured areas. Face recognition and live data processing was chosen as the main technology stack. Making the system within the time-frame was the biggest challenge for Dream Creators. Taking the hard time as an opportunity, the team proved to be excellent as denoted by the evaluators from ISRO. They added that "If your team could build a system to detect weapons by image processing, then that would be of great use for the nation" – said chief evaluator. Dream Creators worked extremely hard, dedicating their sleep into work and managed to finish building the system on time, even though they had a hard time building it. Also, Dream Creators were the only team working on an IoT project rather than just coding. Apart from all these, the team had a great time out there learning and enjoying new ideas, aspects and technologies.

Dream Creators headed back home after Ahmedabad with a bag full of goodies by ISRO. As a memory of the event, the team received memento by ISRO and certificates. The team adds in- "Being part of India's biggest digital movement was something indelible".

As stated in the beginning, "young minds are the future of the nation". So, be prepared for that.





**TIST – IEDC Outreach Programme**

TIST IEDC has initiated an outreach programme to provide technical knowledge sharing in Programming, app development, Open source software etc for students of other colleges and schools. Based on the demand, expertise, and availability a tailor made curriculum was designed to make the programme interesting.

IEDC student executive committee members Sidharth Prajosh, Ajay Chacko and Abhishek handled sessions on Arduino, Java, Raspberry Pi, Web development, HTML, CSS3, IOT, Boot strap etc at the following engineering colleges:-

1. Nirmala college of engineering, Chalakkudy, Trichur on 27<sup>th</sup> February 2017workshop on Android
2. MES college of Engineering, Kunnukara, Aug 16 2017 workshop on java programming.
3. MES College of Engineering, Kunnukara, Aug 20 workshop on Arduino





### **Road Safety survey-Issues and Solutions-3<sup>rd</sup> Feb 2017**

To promote social commitment and With an aim to provide technical knowhow to our students regarding the main accident prone areas, Road conditions, road designs, safety aspects etc and for finding solutions to rectify it TIST IEDC had initiated a one day Survey on Road safety partnering with Mulanthuruthy Police Station On 3<sup>rd</sup> February 2017. A Road Safety Survey was conducted under the guidance of Mr.Upendranarayan, CEO, IIRS.

The survey was conducted in the Mulanthuruthy Police station limit. It was a different exposure and a learning curve outside the classroom for the students to identify real time problems.

Mr.Upendranarayan explained in detail the problems we normally face on the road with examples. As an end result of the survey students had installed two safety convex mirrors on the main road and college road.

Total 48 students of Civil, Mechanical and Safety Engineering attended the Survey

### **Workshop on 3D printing-09.03.2017**

TIST IEDC organised a one day workshop for final year Mechanical Students on Rapid prototyping and Reverse Engineering on 9<sup>th</sup> March 2017. Mr Navas , Mr. Nelbin and Mr. Rajeev Nair From Mantide Technologies, an Engineering Design and Services company based in cochin handled the session.



During the workshop they explained about how Design play a vital role in every business, prototyping techniques etc. Students have got hands on training also during the session.





## **Entrepren-Her SUMMIT 2017**

HURUN International (a Leading publishing house based in Shanghai and Mumbai) organized a one-day summit on women entrepreneurship, **‘ENTREPREN-HER SUMMIT 2017’** at Lulu Mariott Hotel on July 7<sup>th</sup> 2017, which was a platform for entrepreneurs for enhancing their knowledge to be more successful and get inspired.

The summit had panel discussions, speaker sessions and networking. Thirteen Girl Students from various branches representing TIST IEDC had attended the programme.



**JULY 7<sup>th</sup>, 2017**  
**@LULU MARRIOTT**  
**9.30am - 5.00pm**

Panel Discussions  
 Keynote Address  
 Networking  
 Inspiration and Fun for Ladies

**Register today!**



**CALL 85907 39393 | 075108 93130 to join the event !**

**A few**  
**BE THERE LADIES & ^ GENTLEMEN !!**

**IEDC Summit 2017- 19<sup>th</sup> August 2017**

IEDC Summit is an annual summit for aspiring student entrepreneurs where more than 2500 students participate for the same. It provides an excellent platform for the students, nodal officers to learn share and network from eminent personalities.



### **IEDC Summit 2017 on 19<sup>th</sup> August 2017-REPORT**

IEDC Summit 2017 organised by Kerala Startup mission was held at Adlux convention centre, Angamaly on 19<sup>th</sup> August 2017.

Kerala Chief minister Mr. Pinarayi Vijayan, Kochi City Police Commissioner M.P Dinesh, central Telecom Secretary Ms Aruna Sundararajan KTU vice chancellor Dr Kuncharia P Issac, Kerala State IT Secretary Mr M Sivasankar, were the dignitaries present at the auspicious function.

The event had participation from around 200 IEDCs across the state. The students have exhibited number of prototypes as part of the event.

KTU vice chancellor Dr Kuncharia P Issac in his key note address highlighted the availability of opportunities to recreate the silicon valley in Kerala. The KTU has been introducing a number of schemes to promote entrepreneurship in youth.

Chief Minister Mr. Pinarayi Vijayan said that the Kerala government will focus more strongly on promoting young and budding entrepreneurs with



policies and all other necessary support as he encouraged college students to set their sights on innovation and excellence.

Twenty two Students from Toc H along with the Nodal officer Mr. Titus Thomas had attended the function. 10 Students were already registered and other students got the opportunity to register on the spot. Our students got the chance to interact with Mr Varun Chandran CEO-corporate 360, chaipani CEO shruthi chaturvedi, scott O'brein founder of a world leading VR and AR company based in Sydney, Australia.

## **GREENROOM – SME STARTUP CONCLAVE**

“GREENROOM” is organised by Mar Baselios College of Engineering & Technology Trivandrum & Bloombloom Dreambiz Pvt. Ltd. On 2<sup>nd</sup> July 2017. The program is in association with The Federal Bank Limited, Kerala Startup Mission, NASSCOM, Head-start, Hykon India Pvt Ltd, UST Global, Amazon Web services, IBM, 100 open startups.

A daylong event, which invited the substantial attention of the media, had eminent speakers, from various disciplines addressing the gathering. A colorful Inaugural session followed by Sessions, Panel discussions etc that threw light into finding ways to enrich innovations in the SME-Startup sector in India. Bloombloom is an online – offline (B’Hub) model of building communities around innovations & entrepreneurship, not just networking between various stakeholders of the business ecosystem, but also enables engagements, interactions as well as standardization.

The event marked the launch of B’Hub, a unique networking hub in educational campuses, aimed to build local communities around innovations and entrepreneurship. B’Hub is a holistic model which basically is a combination of Business Centers, Activity Centers, and Innovation exchange centres.

The Function was presided over by Major Arch Bishop Moran Mor Baselios Cardinal *Cleemis* Catholicos and inaugurated by union minister for Science and Technology and Earth Sciences Dr. Harshavardhan. The audience and speakers comprised of Ministers, Senior Corporate functionaries, Government officials, startup entrepreneurs, Educationalists, Entrepreneurs & Business persons, other stakeholders of the ecosystem, professionals and the student community. There were also provision for stalls and networking lounges for startups and industries, mainly SMEs.





## **IEDC- Advanced Web Technologies Workshop Duration-Three days**

Innovations and Entrepreneurship Development Centre (IEDC) and Department of Information Technology (IT) jointly organized 3 days FDP and **workshop on Advanced Web Technologies** from June 19th – 21st 2017, at Toc H Institute of Science & Technology (TIST), Arakkunnam. The Workshop mainly focused to enhance application Development skill of Students and Faculty. Experts from Industries in addition to teaching staffs were handled different topics which include JavaScript, angular Js, word press etc.

**Day 1:** Mr. Pankaj Kumar G, FISAT, Assistant Professor cum System Analyst, handled the first day. In his opening session he discussed on introduction to Bootstrap framework with examples, also he created the platform for students to develop their own Web Application by providing supports. Later on he explained about HTML5 and CSS3 with Grid basics examples.

**Day 2:** Mr. Sherfin S, an Industrial Research Person, handled the second day. His Session covered the topics including JavaScript, node JS, mongo DB. He explained in detail the installation, database connections, and deployment with examples, to build the students knowledge competency. He offered examples from his own work experiences to grow the student's attention towards application development.

**Day 3:** Mr. Ajeesh G Krishnan, Assistant Professor, TIST, was in charge for the final day of workshop. His discussion carried all over the day about 'word press'. Word Press is a free and open-source content management system based on PHP and MySQL. Starting from installation to hosting techniques he explained in detail each and every step, which makes students capable to start working with their own websites.

Hence, as a conclusion of 3 day-workshop the students who attained knowledge were able to develop their applications. On these days, they comprehended different programming methodologies and way to implement them in a systematic and logical manner. Prominent speakers ended the workshop with more interactive sessions and sharing their own experiences.



### **YES – 3D 2017 – Disrupt.Discover.Develop**

Young Entrepreneurs Summit (YES) is a flagship initiative aimed at instilling entrepreneurship in the minds of students and youth of Kerala. This novel venture by Kerala State Industrial Development Corporation (KSIDC) under the aegis of Industries Department, aims to establish God's Own Country as a vibrant destination of Start-up Entrepreneurs.

The summit will provide the ideal platform for prospective young/student innovators in the state to interact with successful Start-Ups, Venture Capitalists, Mentors in specific core competent sectors from across the country.

The third edition of Young Entrepreneurs Summit was held on 12th September 2017 at Cochin as in the previous years at Le Meridian Convention centre. The summit was titled “YES-3D” wherein the theme would be Disrupt, Discover and Develop. (Disrupt an existing Process, Discover an alternate technology, Develop better product/ service). The summit was inaugurated by Hon’ble Chief Minister in the presence of Hon’ble Minister for Industries and other senior Govt. officials. The Session was started at 10.AM.

A team of 25 Students along with IEDC Nodal Officer representing Toc H had attended the Summit. The Talk Sessions by Dr A Velumani (Chairman and CEO of Thyrocare) and Mr Nagaraj Prakasham (Acumen India Partner) were highly informative and motivational for young and would be entrepreneurs. Students had also got the opportunity to experience the innovative products in the exhibition stalls arranged at the venue. After lunch students attended panel discussions by various entrepreneurs and experts from diverse domains







**YOUNG**

**ENTREPRENEURS**

**SUMMIT**

**A Government of Kerala initiative to  
foster entrepreneurship in young minds.**