

TECHPULSE

THE OFFICIAL NEWS LETTER OF THE I.T DEPT. OF FR. CONCEICAO RODRIGUES COLLEGE
OF ENGINEERING, BANDRA

VISION

**IMPARTING QUALITY
EDUCATION
IN INFORMATION
TECHNOLOGY FOR
NATION BUILDING**

MISSION

**TO DEVELOP GLOBALLY
COMPETENT IT ENGINEERS,
THROUGH HOLISTIC
APPROACH WITH STRONG
FOUNDATIONS AND ABILITY
TO ADAPT TO CHANGING
TECHNOLOGY**

WALL OF FAME



1. The following students from
Third Year IT, participated and
secured the 2nd place in the Smart
India Hackathon 2019

- 1.Tanmay Rane
- 2.Hanoz Darukhanawala
- 3.Yogendra Yatnalkar
- 4.Anmol Panjwani
- 5.Sojan Chandy
6. Aniket Poojari

MENTORS:

Prof. Jay Borade
Joel Dsouza- BEIT

2. Vikram Singh Rathod- BEIT
was recently hired by 'Societe
Generale' through their annual
hiring competition 'Brain Waves'
and was offered a CTC of
INR 17,51,025

3. Jaydeep Ranolia,- BEIT
Qualified GATE 2019

4. Prof. Nilesh Patil was graded A+
for UoM Minor Research Project
Presentation as Co-investigator.

5. Team HandySnake secured the
2nd place in Mumbai hackathon
2019, held at DBIT

Team: Anuj Singh, Sunny Patel,
Akansha Patrao, Mahima Patel

6. Best paper title Financial Planner &
Asset Allocation using ML in
RACEM2019 at VIT, was awarded to
Prof. Prachi Patil, Amit Kawad, Moksh
Khajanchi, Ambarish Patnaker

Program Educational Objectives:

- Establish as Information Technology professionals in organizations that are involved in the creation, maintenance, consulting and use of Information Systems.
- Adapt to changing trends in information technology and support business needs through lifelong learning.
- Pursue higher education, R&D and entrepreneurship.

Program Specific Outcomes:

Our graduates will be able to:

- Contribute towards real life information system development and implementation.
- Learn and practice contemporary IT domain knowledge

Editorial Team

FACULTY INCHARGE:

Prof. Garima Tripathi

STUDENT INCHARGE:

Rebecca D'souza- SEIT , Anmol Panjwani- TEIT

Message from the H.O.D:

Dr. Jagruti Save

It gives me immense pleasure to present the first edition of the newsletter. The newsletter helps to showcase the achievements, progress and ongoing activities of the department and the ways the department looks for the future. It will definitely facilitate all stakeholders well connected with the department. The department of Information technology has shown consistent improvement in achieving academic goals, holistic development of students and research culture.

The department is putting all efforts to ensure the overall progress of the students. It offers many opportunities for students to strengthen their domain knowledge and soft skills. Pre-placement training is offered to third year students to sharpen their skills and make them prepared for the job interviews. Students are encouraged to take up mini projects in their subjects to supplement theoretical knowledge with practical experience.

I thank the entire faculty, staff and my students for their incredible and wonderful involvement in the academics. I would also like to thank the editor and team for their initiative and hard work in publishing this newsletter. I wish the future issues of this newsletter grows with greater ideas and I look forward to reading many more excellent issues in times to come. With my best wishes to the entire team, I end this message with a quote saying:
"Tell me and I forget, Teach me and I will remember, Involve me and I learn" – Benjamin Franklin

Straight from the heart, By Our Alumni:



TRUST ME, I'M AN ENGINEER!

"So what does being a student of Fr. CRCE mean to you?" I remember being quizzed by Prachi Ma'am in the final round of Mr. and Miss Fr. CRCE. "You'll get one minute to frame your answer" she said. One minute seemed awfully less to sum up my four years as I was fast forwarding through the lane of memories.

I recalled my very first day climbing up the slope and telling myself that if I don't graduate as an engineer, at least I would have four years of trekking to show for; how I despised ED because of the effort it took me to imagine objects in 3 dimensions. (Yes! It is hard for some people). I remembered the constant struggle with journal deadlines and writing (copying) assignments. Believe me! There isn't a spot on the 8th floor where I haven't completed my journals. Reminiscing being a part of ITSA and the painstaking efforts that were taken to organise different events along with being the Class Representative aka the Class Warden made me believe "Apun hi Bhagwaan hai". The body-ache from the dance practices and the heartache when we lost was muffled by the insanity of DJ night. The disappointment of being rejected from my dream job that was alleviated by the immense joy I felt when I received my first job offer. And lastly, I remembered my friends - the ones who made my engineering journey worth it!

I began my answer saying "This college has moulded me into an Engineer who will graduate with way more than a degree....."

Today as an alumna of this institution, I am flooded with all these precious memories of my engineering days. It's been two years since I left college, yet the only place I'd rather be is the windy 8th floor of Fr. CRCE.

I am ever grateful to my professors for always being so supportive and for doing a commendable job of tolerating a batch filled with eccentric students every year. And to you, my dear successors, with great love I write this- Step out of your comfort zone! Challenge yourself to learn beyond your curriculum, don't be afraid of failure and always remember, ENGINEERING gets the best out of you.

-Lillita Rhea D'souza
(BE Info. Tech., Batch of 2017)

DEPARTMENT EVENTS



SEMINARS:



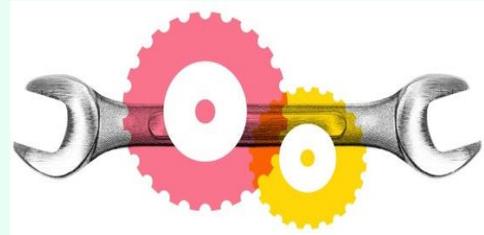
30 July 2018: Innovation in Entrepreneurship

Mr. Devesh Chawla, the founder and CEO of 'Chatur Ideas', a startup enabling platform was the speaker for this seminar. Starting with the introduction, he enlightened the students with various difficulties faced while aiming to be an entrepreneur and how can one overcome those with certain rules and techniques.



28th January 2019: TCS event on 'cognitive skills , design thinking and critical thinking

'This seminar was organized by the ACM council of FR.CRCE and TCS to make the students aware about the emerging field and scope of 'Design Thinkers'



WORKSHOPS:

Web development plays a very important role in today's competitive world. Web development skills, if mastered, gives a professional the upper hand over other professionals. So, in order to introduce web development to the students, Bootstrap and *the* basics of Web Development were taught to them by their seniors who are fluent with the language and framework



31st August, 4th September 19th January 2019 : Bootstrap 2019 : Bootstrap workshop Session for First Year IT for Second Year IT students students



28th February, 22nd March 2019

Introduction to Machine Learning, use of Kaggle ML repository with IRIS dataset, demonstration of different classification techniques such as Ensemble Learning, Random Forest and Support Vector Machine
On Kaggle repository.

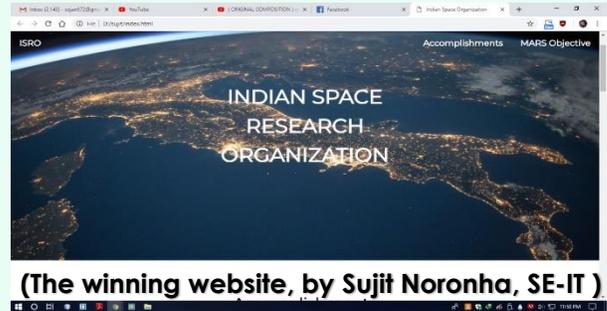


NON-TECHNICAL COMPETITIONS: TECHNICAL COMPETITIONS:



7th September 2018(Synergy): Blur

In this battle of cars, everyone who participated, got a heart-pumping experience while battling it out with other players. The setup was done using a projector for better visual and sound effects



(The winning website, by Sujit Noronha, SE-IT)

15th March 2019: Web Master

This Crescendo, the ACM council organized 'Web Master'.

Given a problem statement, a website had to be developed within 60 minutes, which would attract users and have different functionalities. The most relevant and attractive website would win cash prizes!



16th March 2019: Linux Master (Crescendo)

This event required the participants to have basic knowledge of Linux commands.

The participant who would be able to solve the given set of instructions using the proper commands, in the shortest time would win.



INDUSTRIAL VISIT

21st-28th December



The ACM and CSI councils of Fr.CRCE, collectively organised the official industrial visit for the academic year 2018-19 on the 21st of December 2018.

The palaces visited were: 1.Coorg 2.Mysore 3.Bangalore A group of 46 students from the IT and Computer Engineering streams were accompanied by 3 faculty members of the college, namely, Prof. Garima Tripathi, Prof. Nilesh Patil and Prof. Akansha Magare

The industries covered were:

1. ISRO
2. STPI
3. M-Power Global Inc.
4. Hindustan Aeronautics Limited (HAL)

An expert from each of the industries gave the students valuable practical knowledge and the areas of growth in the engineering field.

Along with the industrial visits, local sightseeing was also carried out, which added to the 'Fun-Factor' of the trip.

EXTRA CURRICULAR AND CO CURRICULAR ACHIEVERS

Susanne Tuscano & Aasawari Namjoshi	Chess	1st	BEIT	Shivani Bhatti, Aasawari Namjoshi	Carrom	2nd	BEIT
Prachiti Gurunath Tayshete	Roadies	1st	BEIT	Pranjal Jain, Priyanka Vaidya			
Trish Bandhekar, Nishant Seth, Stafford Crasto, Sonu Yadav	Basketball	1st	BEIT	Renita Dsilva, Steffi Andrade, Nadia Dsilva, Katoushka Gracias, Arlene Dcosta,	Throwball	1st	TEIT
Gaurav Verma	Poem Recitation	2nd	BEIT	Pranali Anushka Paradhkar, Riya Fernandes			
Suzanne Tuscano, Disha Solanki, Aasawari Namjoshi, Aurelia Fernandes, Alisha Gonsalves,	Throwball	2nd	BEIT	Nathan Fernandes	Footpool	1st	TEIT
Upadnya Chavarkar, Princess Singh, Divya Varghese, Tanvi Rasam				Keenaj, Harkirat,,Manik Ethan, Ashish	800mrace	2nd	SEIT
				Rohin Vaidya	Basketball	2nd	SEIT
				Rohin Vaidya	Capture the flag	2nd	SEIT
				Kenneth Rebello	Code Swapping	2nd	SEIT
Suba, Sushmita,	Badminton,	2nd,	BEIT	Jeet Trivedi, Chinmay			
Pranjal,Rujuta	T T	2nd		Gawde, Shubham Vira,	PUBG	1st	SEIT
				Bharghav Bhatt			



OUR ACADEMIC ACHIEVERS

1ST YEAR
DSILVA NOVIA
9.11

2ND YEAR
KAREN MACHADO
10

3RD YEAR
ARLENE D’COSTA
10

4TH YEAR
GONSALVES ALISHA
9.59

TIWARI DEEPAK
8.72

TANWAR PRIYA
9.54

DSOUZA LERISHA
9.69

SHETTY SUPARNA
9.44

RANE SAMEEKSHA
8.41

SANCTIS ISAAC
9.23

RANE TANMAY
9.54

SOLANKI DISHA
9.15

SUBJECT TOPPERS

SEIT

- 1. Applied Mathematics - III**
/ MACHADO KAREN FELIX SMITA 92/100
- 2. Logic Design**
/ SHAH RASHI HITEN MEETA 88/100
- 3. Data Structures & Analysis**
/ NAIK SHUBHAM SANJIV VIDYA 88/100
- 4. Database Management System**
1.040 / MACHADO KAREN FELIX SMITA 93/100
- 5. Principle of Communications**
1.040 / MACHADO KAREN FELIX SMITA 88/100

TEIT

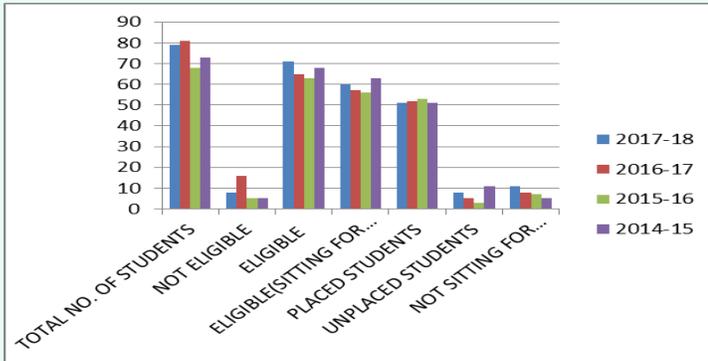
- 1. Microcontroller & Embedded Prgg.**
/ ANDRADE STEFFI FRANCIS HELEN 81/100
- 2. Internet Programming**
/ SINGH ANUJ KUMAR ANJU 87/100
- 3. Adv. Data Management Technology**
/ DCOSTA ARLENE ANTONY EUGINE 82/100
- 4. Cryptography & Network Security**
/ DSOUZA LERISHA JANICE JOHN 89/100
- 5. Elective - Adv Data Str & Anal / E-Comm & E-Business**
/ MANE VISHAL JAGDISH JAYASHRI 92/100

BEIT

- 1. Software Project Management.**
/ SHETTY SUPARNA SUDHAKAR PAVITRA 82/100
- 2. Cloud Computing**
/ CRASTO STAFFORD IVY 81/100
- 3. Intelligent System**
/ GONSALVES ALISHA ROBY MINAL 82/100
- 4. Wireless Technology**
/ GONSALVES ALISHA ROBY MINAL 82/100
- 5. Elective: Usability Engineering**
/ JAIN PRANJAL NIRMAL CHANDRA 82/100



PLACEMENT STATISTICS



2017-18

Total Eligible Candidates who sat for placements	= 60
Total Candidates Placed	= 52
Total Candidates moving for higher studies	= 11
Total Ineligible Candidates	= 08
Percentage Candidates Placed	= 86%



KHANVILKAR AYUSH PRASHANT	JP Morgan
SATHAYE SANAT SHRIRANG	Accenture
ACHARYA RASIKA SUNIL	Accenture
ALMEIDA SNEHA NAZARETH	Accenture
ARUJ MYRON MARCELINE	Accenture
BENJAMIN SAMEEP FRANKLIN	LTI
CRASTO NAOMI MARGARITA CEDRIC	Nerolac
DANGE PRANAV JAYWANT	Accenture
DCUNHA SHANNON MERVIN	Media .Net
DESAI RUSHABH JAYWANT	Accenture
DHURI SHUBHAM SHYAM	Atos
DSOUZA AUNIK VALERIAN	LTI
DSOUZA SHALLOTE GINO	Accenture
FERNANDES LARRIS ROMAN	TCS
GEORGE ALVINA VERGHIS	Accenture
GUPTA PUJA ARVIND	TIAA
HAJARE NUPURA GIRISH	Accenture
INGOLE GIRIJA VASANTI	Atos
IYER SAVITRI KUMAR	Accenture
JOEL IVAN JOHN P. WILLIAMS	Capgemini
KANVINDE RAHUL RAJESH	Oracle
LANJEWAR SAYALEE RAMESH	Accenture
LOPES LESTER LOUIS	Atos
MAKWANA SHRADDHA MUKESH	J.P. Morgan
MEHTA AKASH RAJENDRA	GEP
NADAR MOUNTDENYRAJ CHELLADURAI	Accenture

NARULA MEHUL AJAY	GEP
OEDRA ANUJ PRAKASHBHAI	Atos
OEDRA KARAN GAGANBHAI	L&T
PATADE AKSHAY PRADEEP	Atos
PAWAR SHUBHAM SHIVAJIRAO	L&T
ROBIN MATHEW SAMUEL	Accenture
SAHASRABUDHE TANMAY SHRIKANT	TIAA
SEQUEIRA DARREN SYLVESTER	GEP
SHARMA RISHABH MAHENDRA	Accenture
SHETTY SWATHI SADANAND	Accenture
SINGH SWETA SHAMSHER SINGH	Oracle
SUBIN JOHN CHERIAN	L&T
USHA PRIYA MURUGESAN	IB
VARADE ANIKET SANJAY	Atos
WAKHARE VASHISHTH DILIPRAO	Atos
DSILVA CLARISON JAMES	Accenture
GUJAR RUHI SANJAY	Accenture
MAHADIK SHUBHAM DNYANDEV	Atos
MANE AKSHAY RUPCHAND	Atos
RODRIGUES JOYSON JOSEPH	TCS
RODRIGUES SANIL AMON	L&T
SHIVAGAN PRASHANT ASHOK	Capgemini
SHUKLA KUSHAL SANTOSH	Accenture
TANDEL SAQLAIN SAJID	Accenture
ZANTYE BHARGAV MAHESH	J.P. Morgan
NARKHEDE AKSHAY VILAS	FP



INTERNSHIP

HIGHER EDUCATION 2017-18

Nishi ta Bhatankar	Viom Business Solution	TEIT
Crystal Dsouza	Siemens Limited	TEIT
Ryan Dsilva	Teach To Lead	TEIT
Prabhjot Niharika Kaur Bamrah	Agile Akansha	TEIT
Anirudh Pandey	SmartGrad	TEIT
KatoushkaGracias	Viom Business Solutions	TEIT
Niharia Gogate	Viom Business Solutions	TEIT
Vishal Mane	SmartGrad	TEIT
Nadia Katoushka Gracias	Lauren IT Pvt. Ltd	TEIT
Jaydeep Ranoliya	kWatt Solutions Pvt. Ltd.	BEIT
Atharva Raut	Liberty General Insurance	BEIT
Joel Dsouza	Automative Exchange Private Limited	BEIT
Siddhi Khanvilkar	Aurionpro solutions limited	BEIT
Suparna shetty	NSE India	BEIT
Joshiha	TKDR Technologies	BEIT
Jill Goswami	TKDR Technologies	BEIT
Priyank Shah	e-Yantra Labs, IITB	BEIT
Navil Rodrigues	Scinotic solutions Pvt. LTD	BEIT
Mayur Pawar	Smartgrad	BEIT
Vikram Rathod	Wop	BEIT
Moksh Khajanchi	Mahindra and Mahindra Ltd	BEIT
Nainam Shah	3A Financial Services Ltd	BEIT

NAME	UNIVERSITY
PEARL ALMEIDA	UNIVERSITY OF BOSTON
RODRIGUES KEVIN	UNIVERSITY OF BOSTON
DHAMIT DALVI	UNIVERSITY OF BOSTON
	AT DALLAS
PATIL SANJANA	UNIVERSITY OF TEXAS
	AT DALLAS
SHAH NISARG	UNIVERSITY OF NORTH
	CAROLINA
DSOUZA REBECCA	UNIVERSITY OF TEXAS
	AT DALLAS
THAKUR JEET	ROCHESTER INSTITUTE
	OF TECHNOLOGY
SHETE SHUBHAM	SYRACUSE UNIVERSITY
DURGESH PANCHAL	MONASH UNIVERSITY
RODRIGUES KEVIN	UNIVERSITY OF BOSTON



FACULTY CONTRIBUTIONS

MINOR RESEARCH GRANTS:

Project Title	Faculty name	Student name	Amount Sanctioned
Driver activity monitoring and warning system	Prof. Prajakta Dhamanskar	Priyank Shah, Deval Srivastav, Saim Shaikh	Rs 25000/-
Baby Monitoring using Smart Cradle	Prof. Sarika Davare	Atharva Raut, Pranav Pakhale, Tanvi Rasam	Rs 25000/-

PUBLICATION DETAILS:

Sr.no	Paper Title	Authors	Journal
1.	Mood and Emotion Recognition : A survey	Prof.Jay Borade,Robin Johri,Priyanka Vaidya,Pranjal Jain,Shivani Dhopawkar	JETIR
2.	A survey on Big Data Frameworks and Approaches in Health Care Sector	Prof.Jay Borade,Joel Dsouza,Divya Varghese	IRJET
3.	LPG Leakage Detection System	Prof.Garima Tripathi,Prashant Shivgan,Saqlain Tandel,Parag Chache	IJRASET
4.	Content Based Audio Classification & Retrieval using Segmentation,Feature Extraction and Neural Network Approach.	Prof.Nilesh M.Patil, Dr.Milind U.Nemade	IC4S

COURSES ATTENDED

Name of faculty	Name of Program	Program Conducted in
Garima Tripathi	Internet of Things using Arduino and Raspberry Pi with Hands On Training	St.Xaviers Institute of Engineering
Nilesh Patil	Two Days Hands-on Training on Wireless Sensor Networks	St.Xaviers Institute of Engineering
Garima Tripathi	Miniproject	Swami Vivekanand College of Engineering
Nilesh Patil	Wireless Network and Sensor Network Lab	Terna Engineering College, Nerul
Sarika Davare	God as an Engineer	St.Xaviers Institute of Engineering

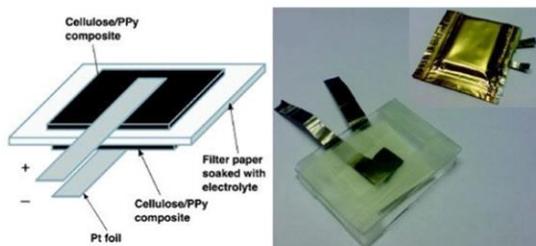
Paper Battery – The Future Power Source



A paper battery is an energy source which is more flexible and thin. This device is a combination of carbon nanotubes with cellulose based paper. The paper battery can act in two ways. A battery as well as a super capacitor. These non-toxic, flexible batteries can be used as a power source to next generation electronic devices, medical devices, hybrid vehicles, etc. Scientists have developed batteries of size slightly larger than a postal stamp that can produce energy that is enough to illuminate a small bulb. In future we can expect a stack of paper batteries that is able to power up a car.

WORKING:

A normal battery contains a lot of separate components. While in a paper battery all these components are made to a single unit, which makes it more energy efficient. The main components of a paper battery are carbon nanotubes having thickness one millionth of a centimeter. The carbon is the reason for the thick black colour for the battery. These nanotube films act as the electrodes which are embedded in cellulose based paper, soaked in ionic electrolytic liquid. The electrolyte does not contain any water content. So as there is nothing to freeze or evaporate, it can be used in any environmental conditions. The battery can produce power even if it is folded or cut



ADVANTAGES:

The main advantage of the paper batteries is that it can be folded, cut or shaped for the required applications without any loss in its efficiency. If the battery is cut into half, the energy produced by them is halved. Stacking more than one paper batteries multiplies its power output. A sample of size of a postal stamp is able to produce about 2.5 volts of electricity. These batteries are also environment-friendly. Presence of cellulose and lack of toxic contents in paper batteries makes the device environmental friendly, compared to the traditional lithium ion batteries.

- Professor Garima Tripathi,
Assistant Professor,
IT Department

A Gist- Web 1.0 , Web 2.0 , Web 3.0

Web 1.0-

Web 1.0 refers to the first stage of the World Wide Web evolution. Earlier, there were only few content creators in Web 1.0 with huge majority of users who are consumers of content. Personal web pages were common, consisting mainly of static pages hosted on ISP run web servers, or on free web hosting services.

Four design essentials of a Web 1.0 site include:

- Static pages
- Content is served from the server's file-system
- Pages built using Server Side Includes or Common Gateway Interface (CGI)
- Frames and Tables used to position and align the elements on a page

Web 2.0-

Web 2.0 refers to World Wide Website which highlight user generated content, usability and interoperability for end users. Web 2.0 is also called participative social web.

The web browser technologies are used in Web 2.0 development and it includes AJAX and JavaScript frameworks. Recently, AJAX and JavaScript frameworks have become a very popular means of creating web 2.0 sites

Five major features of Web 2.0-

1. Free sorting of information permits users to read and classify the information collectively
2. Dynamic content that is responsive to user input.
3. Information flows between site owners and site users by means of online evaluation and online commenting.
4. Developed API to allow self-usage, such as by a Software application.
5. Web access leads to concern different from the traditional Internet user base to a wider variety of users.

Web 3.0-

It refers the evolution of web utilization and interaction which includes altering the Web into a database. It enables the up-gradation of back-end of the web, after a long time of focus on the front end(Web 2.0 has mainly been about AJAX, tagging and another front-end user experience innovation). Web 3.0 is a term which is used to describe many evolution of web usage and interaction among several paths. In this, data isn't owned but instead shared, where services show different views for the same web/the same data.

Below are 5 features that can help us define Web 3.0

- Semantic Web
- Artificial Intelligence
- 3D Graphics
- Connectivity
- Ubiquity

-Pushpak Chajjed,
SE-IT