THE TECH MESSENGER

Department of Computer Science & Engineering
UniCS

News Letter -
Volume of the Year
August 2018 - July 2019

The Great Minds, with Dynamic Thinking!.

This annual newsletter emphasizes on the activities held by the department in the entire year written by the team faculties and editorial team of students. It brings out the hidden talents, ideas and innovations and maintain the log of activities and programs performed in the department for the students and faculties . It is a means to enhance the horizon of students' knowledge in various fields of technologies and to cater to their growth. It also brings out the various talents of the students and ignite their creativity. Every year the theme of the letter is changed in order to spark interest in the minds of young budding engineers.

Institute Vision

"To be center of excellence recognized nationally and internationally, in distinctive areas of engineering education and research, based on a culture of innovation and invention."

Institute Mission

"BIET contributes to the growth and development of its students by imparting a board based engineering education and empowering them to be successful in their chosen field by inculcating in them positive approach, leadership qualities and ethical values."

Department Vision

"To be a center-of-excellence by imbibing state-of-the-art technology in the field of Computer Science and Engineering, thereby enabling students to excel professionally and be ethical."

Department Mission

- M1: Adapting best teaching and learning techniques that cultivates Questioning and Reasoning culture among the students.
- M2: Creating collaborative learning environment that ignites the critical thinking in students and leading to the innovation.
- M3: Establishing Industry Institute relationship to bridge the skill gap and make them industry ready and relevant.
- M4: Mentoring students to be socially responsible by inculcating ethical and moral values.

Newsletter Objectives

- Achievements of the Students and Faculty members from the CS & E department in Curricular, Co-curricular and Extra-curricular Activities.
- The Recent trends in the area of Computer Science & Engineering and related areas.

About the Department

Department of Computer Science and Engineering was established in 1984 as an academic center for undergraduate studies in engineering. Department offers Undergraduate, Post graduate and research programs in Computer Science and Engineering field and is affiliated to Visvesvaraya Technological University, Belagavi, Karnataka. Undergraduate program is accredited two times by NBA.

It is supported by well qualified faculty, non - teaching staff and best - in - class Infrastructure. The faculty members are actively involved in research and development. The staff members have also won the awards from reputed IT organizations like Infosys, IBM and Wipro and achieved academic excellence. 12 faculty members are pursuing research at reputed universities. Department has applied for one Indian patent in the field of Cluster head election Strategy. One of the faculty members has got best paper award in the URENG conference held at Dubai. Department has produced 5 doctorates in last 10 years.

The Department of Computer Science and Engineering of BIET has been at the forefront of churning out software engineers with a high caliber of technical expertise. It continues to foster and engender the innovation and breadth of vision necessary to excel in the blooming software industry.

From the Editorial...

Greetings to all!

The department is cheerful to present the latest edition of the Department of CSE Newsletter. It motivates, enlightens and enables the Student & Staff community to focus on their goals and achieve more. This newsletter explores the hidden talents, commitment, involvement and achievements of the Department Students and Staff Community in their Extra and Co-Curricular activities to the world.

The yearly newsletter of the Department of CSE covers the information about the Faculty Development Programme, faculty participation, student activities.

We look forward to your continued contribution and participation in this Newsletter. Your good ideas, comments or valuable suggestions about this Newsletter are welcome. This may lead to enhance the quality and professionalism of this newsletter in forth coming editions. Thank you for choosing and spending time with this newsletter.
We hope, this Newsletter encourage you to conquer more in your field.

sd/-
Editorial

NEWS LETTER COMMITTEE

Patrons
Dr. Shamanur Shivashankarappa
MLA, Hon. Secretary, BEA

Sri. S. S. Mallikarjun
Joint Secretary, BEA

Advisory Board
Prof. Y. Vrushabhendarappa
Director, BIET

Dr. M.C. Nataraja
Principal, BIET

Dr. Nirmala C.R.
Professor and Head

Editor
Prof. S B Mallikarjuna
Associate Professor
Prof. Waseem Khan
Assistant Professor

Student Editors
Mr. Dev Manu
Mr. Sharath P J

Message from HOD's Desk:

I feel indeed that Department of Computer Science & Engineering is releasing its Annual Newsletter Tech Messenger on 18/09/2019. Faculties of our department are highly encouraged to carry out their research work. Our forum Unics is a platform to bring out the hidden talents of students. Department has organized many Technical Talks, workshops, hackathons for students and FDPs for faculties. This newsletter will highlight all such activities. I congratulate editors of the Newsletter for their effort in bringing out this Newsletter colorfully with all the events covering from August 2018 To July 2019. I wish them all the success.

Dr. Nirmala C.R.
Prof. & Head,
Dept. of CS&E

Department Activities

• In-House Internship for the final year students by "Krackin and Fiabilite Networks" on Data Science, Machine Learning, Cloud Computing and Big Data started on 09/08/2018.

Internship training sessions by Krackin and Fiabbilite Networks

• Mr. Hanumanthappa Budihal (Alumni), Associate Software Developer at WE-WORK Technologies Ltd. Bengaluru delivered a technical talk on "Problem Solving Skills and Competitive Coding" for pre-final year students on 27th Aug 2018.

• Mr. Utpal Singh (Alumni), Business Technology Analyst, Deloitte USI, delivered a technical talk on "Trending Technologies in the IT Industry" for final year students on 6th Sep 2018.

Talk by alumni on Trending Technology

• Senior Consultants from Century IT Services addressed pre-final year and 2nd year students regarding the "Importance of Training on latest technology and their relevance in future" on 8th Sep 2018.

• Department organized "Mock Skype-Interview" sessions for TCS aspirant of CSE on 10th Sep 2018. Alumni of CS/IS students of BIET conducted the Interview.

TCS aspirants of CSE department taking the Interview at various panels.
Alumni of CS/IS , BIET conducting the Mock Interview.

• Forum Inauguration and Orientation to Fresher's was held on 11th Sep 2018, Chief Guest Mr. Tejas Jain (Alumni), Senior Software Engineer, TCS-USA inaugurated the function.

Mr. Tejas Jain, Senior Software Engineer, TCS USA inaugurated the function.

• Inauguration of BPL-11.0 an Inter-Departmental Cricket Tournament was held on 10th Oct 2018. Dr. S Subrahmanya Swamy, Dr. Nirmala C R along with faculty from various departments inaugurated the function.

BPL Inauguration-11.0

• Department organized 2-Day Bootcamp and 24-Hrs non-stop Hackthon on "Building Chatbots using IBM Watson Assistance" conducted by SmartBridge in collaboration with IBM on 11th, 12th and 13th of Oct 2018 at BIET. 300 plus students from CSE, ISE , MCA and EC department of BIET and from various other Institutes participated in the event.

Mr. Yuktesh Chintamadaka, Developer Advocate IBM India Ltd. and Mr. Amarendra Katkam , Chief Technological Officer SmartBridge , Dr. K S Basavarajappa, Prof. Y Vrushabhendrappa , Dr B E Rangaswamy and Dr. Nirmala C R inaugurated the function

• Department organized 3-Day workshop on "Fundamentals of Declarative App Building using Salesforce Lightning Platform" in association with Salesforce for 3rd year CSE students from 9th Oct to 11th Oct 2018. Mr. Kumara Murali , Technical Instructor , Salesforce , Bengaluru-India was the resource person

Salesforce Workshop on Fundamentals of Declarative App Building

• Valedictory of BPL – 11.0 was held on 13th Nov 2018. The final match was held between 5th Semester Civil and 5th CS students. The trophy was bagged by Civil Students

E&C Department won BPL-11.0

• Department organized 1-Day "Soft Skills Training" Program for 3rd Year students on 15th Dec 2018. The program was conducted and delivered by Mr. Vidyadhar Joshi, Senior Project Manager, Altimetrix India, Pvt. Ltd.

Soft Skills Training Program

• Alumni Meet and silver Jubilee Reunion program of 1989 to 1993 batch was held on 23/12/2018. Around 25 alumni, situated around the world have joined for the alumni meet. Alumni meet was held in two phases. First phase was "Guruvandana"- Felicitation to all teachers was done. In the second phase "Spandana"- Interaction with final and pre final year was held. Mr. Rajesh Wassalli, Mrs. Veena Sridhar, Mr. Anand Satyanarayana, Mrs. Indira and many other alumni discussed about various aspects of life after engineering. They also had a panel discussion and question answer session with students.

Alumni Meet of the batch 1989-1993

• Department has conducted "TCS Tech-Bytes" (preliminary round) for all the CS&E and other branch students on 15th Feb 2019.

• One day Industry workshop on "Machine Learning to deep learning" was conducted in collaboration with BCIC for pre final year of CS/IS students and faculty members of BIET and for other college faculties on 23rd Feb 2019.

Workshop on Machine Learning to Deep Learning

• Department has conducted Cooking without fire and slow Bike Race competition for girl students in connection with International Women's day Celebration on 12th March 2019.

• Department of CS&E has took part in International Womens day Celebration Organised by BIET College on 26th March 2019 at S.S Mallikarjun Cultural Centre, BIET campus, Davangere.

• Department has Organized Open House Project Exhibition "PROGYAN-1.0" for final year students on 20th and 21st of May 2019. Three teams were selected as best Projects.

  1st Prize for the project "Automatic Bone age, gender assessment using Femur", under the guidance of Prof Santosh K.C.

  2nd Prize for the project "Counter to Code" under the guidance of Prof. Naresh Patil K M

  3rd Prize for the project "Gold Rate Prediction using Machine Learning Techniques" under the guidance of Dr. Nirmala C.R.

• Department has conducted "Forum Valedictory and Farewell Function" for the outgoing students on 24th May 2019.

Forum Validictory and Farewell Function

Faculty Participation

- Dr. Nirmala C R attended one day workshop on "Machine Learning" hosted jointly by VTU & Google Developers, Bengaluru on 7th July 2018.
- Prof. Naveen Kumar k R and Prof. Abul Razak M S attended 3-Days Faculty Development Program on "Machine Learning" held at RNS Institute of Technology, Bengaluru from 19th to 21st July 2018.
- Prof. Naveen Kumar K R, Prof. Waseem Khan and Prof. Arun Kumar G H received "Certificate of Appreciation" for adopting Impartus Lecture Capture and being the part of Digital Revolution in Education.
- Dr. Nirmala C R and Dr. Pradeep N participated in the 33rd Edition of Bridge-2018 Bengaluru (The Largest Industry-Institute Event of Asia) organized by ICT Academy held on 26th Sep 2018 at Hotel Le Meridien, Bengaluru.
- Prof. Radhika Patil and Prof. Anu C S delivered a session on "BLOOM's TAXONOMY" to the faculty members of the department which was scheduled on 28th Sep 2018.
- Prof. Anu C S attended 2-Days workshop on "Internet of Things (IoT) and its Applications" on 10th and 11th Dec 2018 at VTU, Regional Centre, Mysuru organized by Dept. of CS&E, Centre for PG Studies , Mysuru in association with FluxGen , Bengaluru.
- Dr. Chethana Prakash has visited to UPSC Delhi as an expert to frame question paper for UPSC exams on 20/02/2019 to 22/02/2019.
- Dr . Ashoka K, Dr . Roopa G.M, Dr. Vinutha H.P has been awarded Ph.D during the convocation on 10th March 2019 held at VTU Belgaum.
- Dr Pradeep N and Prof. Naseer R has attended 2 day workshop on the Deliberation of 3rd to 8th semester 2018 scheme and syllabus at SJBIT, Benagluru from 29/04/2019 30/04/2019.
- Dr. Chethana Prakash has visited to UPSC Delhi as an expert to frame question paper for UPSC exams on 27/05/2019 to 29/05/2019.

Alumni Corner

Malashree JD

Alumni,
batch 1990-1994
Vice President,
Qwikcilver Solutions Pvt. Ltd

Malashree is from Karnataka , native of Davanagere. She is proud alumni of BIET, 1990-1994 Computer Science& Engineering batch, 4th rank holder of Kuvempu University. She is currently serving at Qwikcilver Solutions Pvt. Ltd as Vice President of Technology, Bangalore. Qwikcilver is leading Giftcard solutions platform in India and South East Asia. Her campus life in her own words " The four years in BIET is most memorable and precious days of my life. College Campus was so beautiful, organized and every department was quite well established back 1990 itself. Very eminent Professors and teaching faculty. Studying here was so different from what we were learning in schools. The emphasis on Applied Science made engineering so attractive with teachers always ready extend their support. We started spending more time in labs from 2nd year itself. College was so open and encouraging for curios students. Department encouraged students to work on projects that are innovative, experimental. Our batch feels lucky to have such knowledgeable and friendly teachers and professors. They set right foundation for our upcoming career." Malashree started her career with Aditi Technology solutions as software engineer, then worked on first made in India CRM Software Platform Talisma at Talisma Corporation as Lead and Architect. She then moved to Qwikcilver Solutions, took up the Delivery manager role of the electronic Gift Platform .Currently serving as VP in technology. Product development, Startups , Finance and CRM domains Data Science are her core strengths. She also active outdoor person, participates in Marathons and Trekking , gardening.

Faculty Corner

Dr. Pradeep N

Associate Professor

CSE dept., BIET

Title: "Impact of Digital Technologies
in Higher Education Institutions"

The adaptation of Digital technologies within Higher Education (HE) changed significantly in the last decades especially in Teaching Learning Process. The earlier analogue technologies, such as whiteboards and handouts, has largely been replaced by digital ones, e.g. PowerPoint presentations, smartboards and online course platforms such as Coursera, Udacity, NPTEL and other MOOCs. This technological paradigm shift has been an ongoing process, it is likely that this trend will continue into even more advanced technologies such as Augmented Reality (AR) or Virtual Reality (VR). AR and VR have its significant impact on Medical Teaching and Research and currently marketed as a potential leap in how education can be conducted. It is clear that technologies have significant impact on many areas of HE.

HE of today often rely on digital technology in order to conduct education, e.g. PowerPoint presentations or distribution of course documents through online education platforms such as Google classroom, Edmodo etc. This implementation of digital technologies has had impact on teaching processes as well as learning processes by increasing student activity in ways that analogue technologies did not. In order to utilize the full strengths of Digital Technologies, HEs has to invest on sustainable eco system which caters the demands of Digital Technologies. Thus, HE organizations need to provide necessary resources in order to enable these changes. Understanding the possibilities and constraints of digital technologies in all aspects of HE is important to better understand the challenges that digital technologies of the future faces, if it is to be incorporated in HE. This becomes increasingly important for HE institutions to understand so that they can make a better evaluation about whether these technologies are worth for the investment.
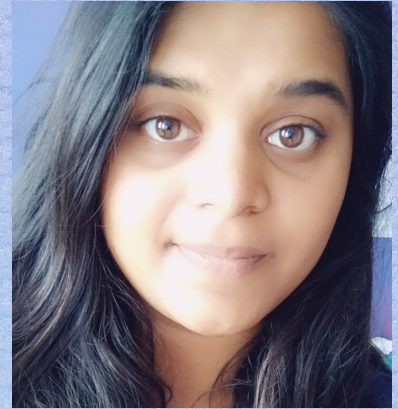
Student Corner

Ridhi M Jain

Student
CS&E,
2017-2021 batch

Title: " Docker as Emerging Technology to build
standardize applications"

Docker is a set of PaaS products that uses OS-level virtualization to deliver software in packages called containers. Containers are portable among any system running in linux OS that are isolated and bundle their own software, libraries and configuration files.Multiple languages, frameworks, architectures, and discontinuous interfaces between tools for each lifecycle stage creates enormous complexity. Thus, Docker can package an application and its dependencies in a virtual container that can run on any Linux server. The Docker daemon is a service that runs on your host operating system. The Docker daemon itself exposes a REST API.

Objective:

- Docker's primary focus is to automate the deployment of applications inside software containers and the automation of operating system level virtualization on Linux. It's lightweight then Containers and boots-up in seconds.
- Docker is the standard to build and share containerized apps - from desktop, to the cloud.
- Docker simplifies and accelerates the workflow, giving developers the freedom to innovate with their choice of tools, application stacks, and deployment environments.
- Containers are a standardized unit of software that allows developers to isolate their app from its environment, solving the "it works on my machine" headache.

Rishi Pradeep Sharma

Student
CS&E,
2017-2021 batch

Title: " Robotic Process Automation "

Robotic Process Automation and the Job Insecurity!

Every enterprise small or big consists of routine work which no one is ready to do. This day-to-day manual work consist of series of activities such as data extraction, invoice processing, maintaining consumer data, validating files and other tedious works. By these examples we have a glimpse in our mind that OH NO! Not again. But, on the contrary all these work is equally important. Therefore, solution to this problem is the new technology marvel of IT- industry RPA.

What is Robotic Process Automation (RPA)?

Consider an instance where you want to publish an article on various social media platforms every day at a specific time. Would you like to manually? Obviously NO! Generally speaking, it will cost you a lot and would be laborious for you as well. Instead you could make a robot to do such tedious task for you. You could just configure computer software or a robot to interpret the human actions and imitate them. Moreover, you can configure a robot to publish article every day on a given timeline. Doing this, will not only cost you less but will also be less tedious for you. This is just one given instance Robotic Automation Process or RPA can perform. Hence, Robotic Automation Process or RPA is a process of automating processes with the help of robots or software to reduce the human intervention.

Technology is like a gun in hand. It will fire the bullet in the direction towards which the person points. To summarize, we are entering into the fourth industrial revolution. Use of RPA will give us the opportunity to get rid of the repetitive monotonous work. It will also shift our work focus towards complex problem solving and creative thinking which is the key to success in business. Robotic Process Automation with AI will give rise to quality job roles and will bring high level productivity to any business model provided. Above all, automation applied to an inefficient operation will magnify the inefficiency so use it wisely.

Industry Talk

Yuktesh Chintamadaka

Developer Advocate

IBM INDIA

Red Hat OpenShift is an open source containerized platform which helps enterprise organizations to speed application development and deployment on both on-premise and cloud. As OpenShift and Kubernetes are widely adopted and developers are increasingly required to understand how to develop, build and deploy applications in a containerized form.

While some developers are interested in managing the underlying infrastructure, majority of the developers want to focus on developing applications and using OpenShift for its easy building, deployment and scaling capabilities. It is time for every engineering student to realize the importance of containerized platforms in the industry and should start acquiring skills in it.

Thanks

Yuktesh Chintamadaka

Developer Advocate

IBM INDIA

Artist Work

By - Chandana Laxmi And Spoorthy M N