

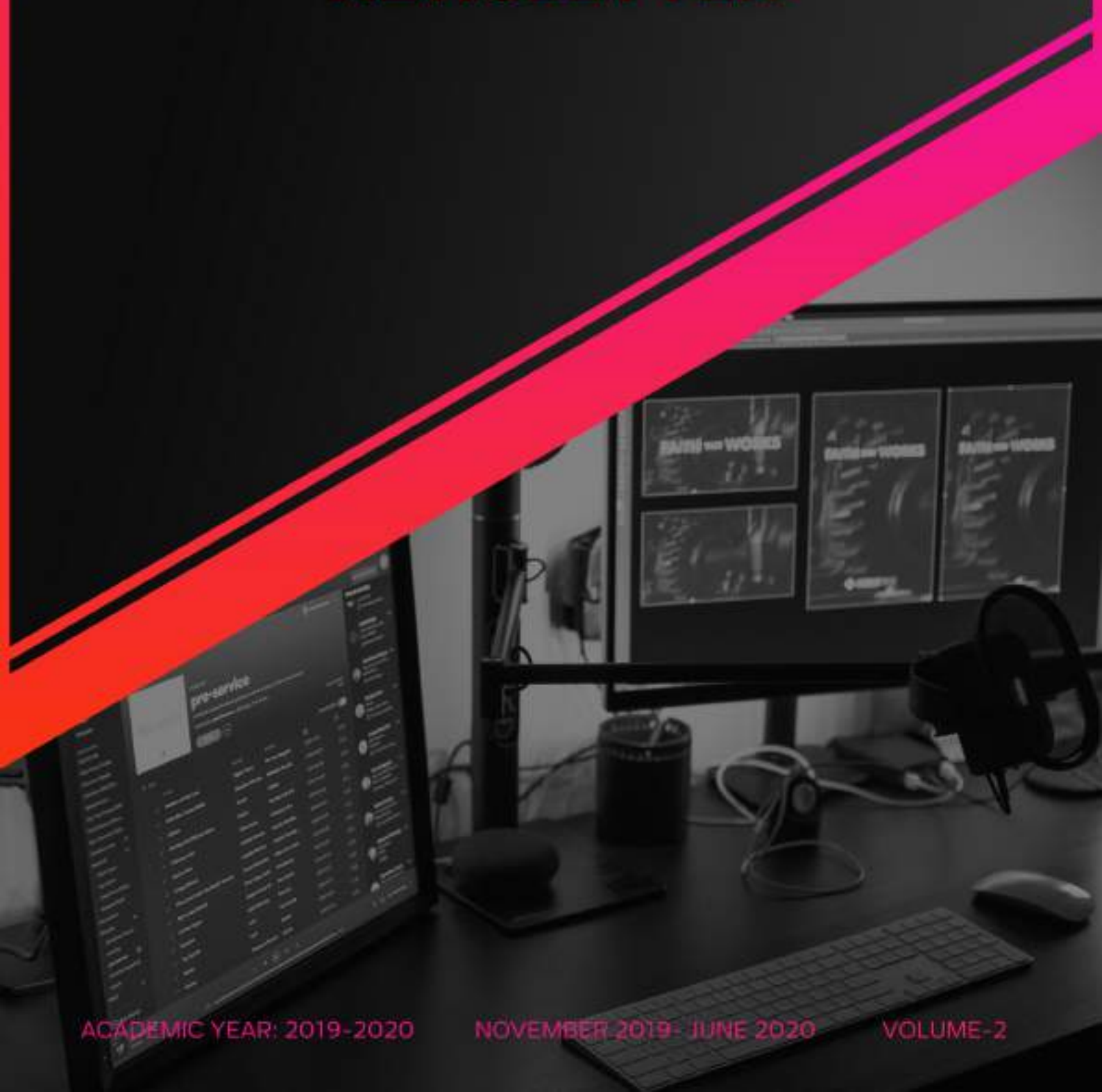


NEW HORIZON
COLLEGE OF ENGINEERING



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

NEWSLETTER



Dear All,

It gives me immense pleasure that the newsletter for the quarter (August 2019–October 2019) has been released. I would like to congratulate my students and faculty members for adding one more feather in the Department's cap by bringing out the newsletter for this academic quarter. This newsletter is a small step, but the step in the right direction and such endeavors will help us reach the top. As you read through the pages you will realize, that the Department had an extremely successful semester. I would like to thank all my faculty members for their tireless efforts to help the department progress at a very steady pace. Efforts of the editorial board are highly commendable. This newsletter encloses and describes the achievements of the students and faculty members from the CSE department in curricular, co-curricular and extra-curricular activities and the events organized by Department of Computer Science and Engineering

Dr. B. Rajalakshmi

HOD-CSE

Dear Reader,

First of all, I would like to congratulate the department of CSE for the publication of this quarterly newsletter. I am sure this newsletter will act as a consolidated information resource for all the events that have been organized by the CSE department in the past three months. In addition to curricular activities, NHCE prides itself in encouraging co-curricular and extra-curricular activities, and I am sure that this newsletter will encourage students to be more involved in such activities. My best wishes to the CSE Department.

Dr. Prashanth CSR

Dean Academics.

Dear All,

Technology has been growing so exponentially over recent years, there has been a steady increase in demand for bright graduates to come in and help to transform areas ranging from data infrastructure to cyber security. It is important to stay up to date with the latest trends in computer science research, to make an informed choice about where to head next. I am happy to note that Department of Computer Science and Engineering is bringing out a newsletter. I am sure that this newsletter will bring value for all the students and readers who are interested in the area of Computer Science in form of latest developments made in technology. I wish, the department all the best for the publication of the Newsletter and in all their future endeavours.

Dr. Manjunatha

Principal

STUDENT ACHIEVEMENT

We are extremely happy that our III semester CSE student Ms. Shreya Pradeep(1NH18CS177) has been declared as one among the Top 7 national finalists in the SAP Semicolon Hackathon 3.0.

As part of their University Engagement initiative of SAP Labs India, SAP Semicolon Hackathon 3.0 provides an opportunity for second year engineering students to brainstorm a problem statement and develop solutions using new-age technologies.

The participants were allowed to select one domain which included Big Data, IoT etc. There were three elimination rounds conducted to filter out the Top 7 for the National Finals at SAP Labs Campus, Whitefield, Bangalore conducted on 18/10/2019.

Ms. Shreya had selected Software Security as the domain and submitted an idea titled "Mitigation of DDoS attacks using RPA and Cloud based solutions", which was presented with the "Edison Award" for the most innovative new technological idea presented during the final panel presentation.



MOU WITH INFIBRIDGE

We are extremely happy that department of Computer Science and Engineering entered into a MOU with "Infibrige - a leading organization for AI solutions" on 30/10/2019 in the presence of our Principal Dr. Manjunatha and Dr. Prashanth, Dean-Academics. The collaboration was signed by the Principal and Mr.Girish Nuli, the CEO of Infibrige.

Under this collaboration the department of CSE will have the following opportunities:

- Internship for students
- Project work for students
- R&D and Testing
- Areas of work in Data analytics, AI, ML
- Industrial visit for students
- Consultancy for Faculty

Initial expectations for both the parties would include:

1. Industry readiness for students
2. Exploring young minds for new ideas
3. Conduct exercises related to product development
4. Prospecting collaboration with overseas schools in similar program
5. Building IPR for Centre of Excellence



EXPERT LECTURE

The department of Computer Science and Engineering organized an EXPERT LECTURE on 24/08/2019 on the topic "Agile Technologies in Industry". Mr. Vinod Unnikrishnan, Associate director, Virtusa, was invited to speak on different topics like AGILE AND SOFTWARE ENGINEERING. The speaker highlighted the different tools available for deployment and also gave an insight on basics of SE. He also spoke about various technologies.



TECHNICAL SESSION ON UNLOCK BIG DATA WITH VERTICA

The department of Computer Science and Engineering in association with Computer Society of India and HP - Centre of Excellence hosted an exclusive session on Unlock Big Data with Vertica on 5/11/2019.

The intent of this session was to lay importance of Big Data and Data Analytics and make the students understand why Vertica is different from other tools.

The session was deliberated by Mr. Lokesh Sharma, Sales Director, India and SAARC, Microfocus, New Delhi.

During the deliberations, Mr. Lokesh highlighted the placement opportunities for Vertica trained students. Students who are currently undergoing the course got a better knowhow of the prospects and students who are in the process of identifying the open elective got a clear path in terms of choosing Big Data as an open elective.

We thank Mr. Ranjan Manish for supporting us in organizing this purposeful event.



A SELF STUDY PRESENTATION ON THE INDUSTRY EXPECTATIONS THROUGH THE THEORY OF MULTIPLE INTELLIGENCES.

The Centre for Life Skills and Lifelong Learning in association with the Department of Computer Science Engineering facilitated a unique initiative of the students on 5/11/2019.

"A Self Study Presentation on the Industry Expectations through the Theory of Multiple Intelligences"

The students took up the Multiple Intelligence test, categorized themselves into groups based on their key intelligence. They interviewed HR executives from the Corporate and presented their findings through various activities representing their intelligence. The versatility of the activities that included Role plays, Rebus puzzles, Anagrams, Crosswords, Press conference, Mime, Logical puzzles, Mind maps; demonstrated their enthusiasm towards this unique Pedagogical tool for assessment. Students' engagement in the Teaching Learning process been well established.



STUDENT ACHIEVEMENT

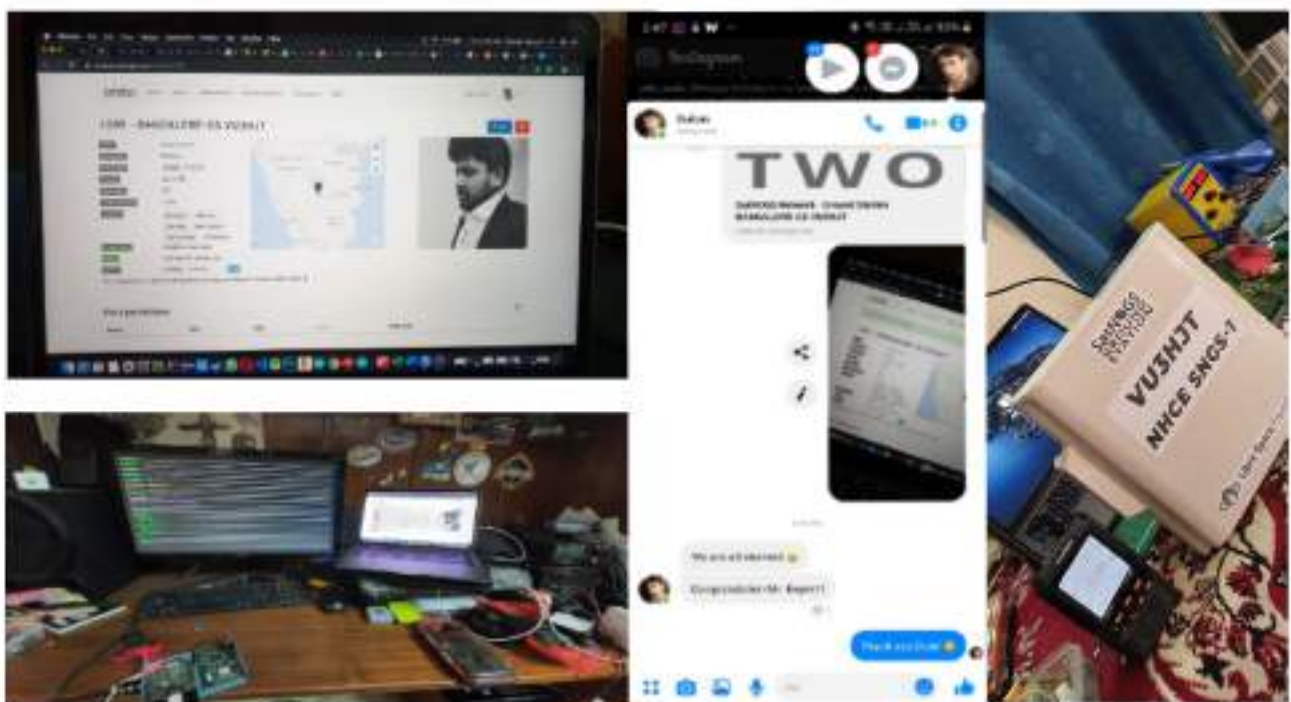
Proud Moment for Us!
First in INDIA.

ONLINE AND FUNCTIONAL SatNOGS GROUND STATION.

We can now perform many observations of passing by Satellites may it be Imaging, Amateur Radio, Astronomy. Also will be linked to the Serbia GS to Collaborate with CSPD (Serbia & former Yugoslavia) for the future INTERCONTINENTAL AEROSPACE COMMAND (ICAS).

One of the major milestone achieved by Indo-Serbia Collaborations! It became reality due to the sustained efforts and tireless works of Mr. Vamsi Sainath, 7 th semester CSE student of NHCE on 8/11/2019.

"Prof.Dusan, Head of Serbia Committee for Space Research and Development (CSPD) appreciated that the student 'Sainath is Great'



WORKSHOP ON CYBER SECURITY AWARENESS

Departments of CSE and ISE, jointly, in association with Computer Society of India, Indian Institute of Science, IT Secure Systems, KSCST and K-tech (GoK) organized "Cyber Security Awareness Workshop" on 12/11/2019 for 7th semester B.E and M.Tech students. Mr. Nagaraja, Director, IT Secure Systems addressed the students on the importance of Security, Security in Social Networking Sites, Encryption, Data Backup, Disaster Recovery and Passwords. Mr. Nagaraja also highlighted the career opportunities for Cyber Security and various certifications.



MINI PROJECT COMPETITION

The department of CSE organized a "Best Mini-Project Competition" for 3rd, 5th and 7th semesters CSE students on 15/11/2019. An expert from industry was invited to judge the competition. Overall, 30 students registered and 20 students participated in the competition from 3rd, 5th and 7th semesters. Projects were judged on the basis of the understanding of the concepts, innovation and authenticity of the project and student's presentation skills.

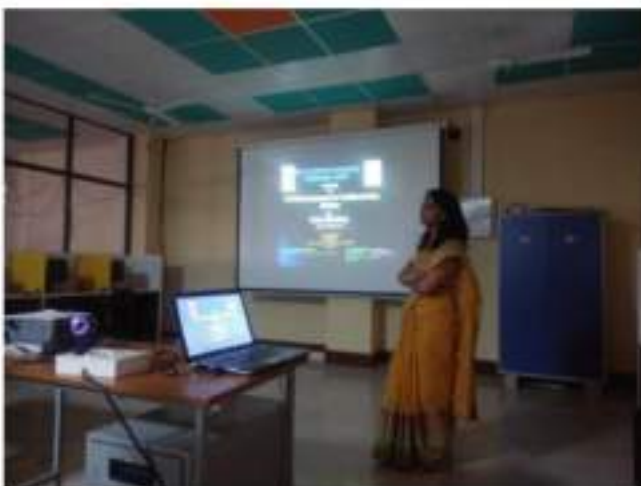
Semester	Winners
3 rd	1 st : Riya Basale, 1NH16CS160 2 nd : Babu Aman Singh, 1NH18CS710 3 rd : Rithika, 1NH18CS159
5 th	1 st : Sriram, 1NH17CS754 2 nd : Dipesh Shrestha 1NH17CS039 3 rd : Aayush Soni 1NH17CS019
7 th	1 st : Moni Krithika 1NH16CS054 2 nd : Giri Kishore 1NH16CS077



FACULTY ACHIEVEMENT

We are extremely happy to inform that Ms. Jaya has been awarded Ph.D by the expert committee of VTU on 2/12/2019. She defended her Thesis titled "Text Mining approach for traditional Indian Medicine" guided by Dr C S Pillai of ACS college of engineering.

In the age of pharmacology, preserving ayurvedic concept is a daunting problem to tackle. Individuals anatomical health assessment from prakriti assessment scores is a crucial step in ayurveda medicine. Prakriti is a significant concept in ayurveda that explains individuality. It expresses unique traits of patients. In this research type2 fuzzy logic based ANFIS is used for query processing on ontology datasets. Experimental results showed that the presented system performs well. Further research included modified FSS for multi objective optimization and the results exhibited higher performance when compared to other evolutionary algorithms. Further scope of the research includes regional wise study of prakriti and prediction of multiple factors like diet, lifestyle, occupation and probable diseases.



INTERNATIONAL CONFERENCE ON INNOVATIVE RESEARCH IN ENGINEERING, MANAGEMENT AND SCIENCES [ICIREMS]

International Conference on Innovative Research in Engineering, Management and Sciences was inaugurated on 19/12/2019 by the honorable registrar of VTU Dr. A. S. Deshpande. In his address he highlighted the importance of 3 E's, Education, Experience & Exposure. He also spoke about project-based learning & frugal innovation. He further emphasized that teachers must focus on teaching, research & administration. The conference proceedings containing the abstracts of all accepted papers was released. During the inaugural program, UNISEC awards were presented to International Key Note Speakers and our Principal received the UNISEC award for New Horizon filing the highest number of patents. Following this, we had two International Keynote Speakers talking on Agile Technologies and Health Management. We had a panel discussion on "Role of industry in designing engineering and management curriculum". This was followed by National Keynote addresses and paper presentations.

For CSE/ISE/MCA stream the keynote speaker was Dr. Balaji Rajindiran, Joint Director, CDAC. He spoke about CNS – Compute, Network and Storage which are components of any computing device. He elaborated on the past technologies and the emerging trends. He explained how client server computing transformed itself to Cloud computing over the years. He spoke about supercomputers and how they are competing with humans in gaming and other aspects of machine learning.



PAPER PRESENTATION SESSIONS UNDER MACHINE LEARNING

Paper presentation sessions under "Machine Learning track" was conducted on 20/12/2019 & 21/12/2019- Day 2 & 3. Dr. Shilpa from MSRIT, Bangalore and Mr Sameer from Infosys, Bangalore were external session chairs. Dr Hanuman and Dr Vinitha were internal session chairs. A total of 36 papers authored by CSE department staff, students and external speakers were presented. Best paper award was given to Mr. Giri Kishore and Ms. Athira, final year students of the department of CSE.



STUDENT ACHIEVEMENT

Sainath Vamshi of department of Computer Science has received the ARISS SSTV Award from NASA for receiving the images beamed by International Space Station (ISS) when it passed over India using the Ground Station built by NHCE Students Satellites Team on 1/01/2020



A VISIT AT EUROFIN'S IT SOLUTIONS

The Heads of Departments of CSE, ECE, ISE, IIC ,TPO along with the Executive Director of Placements visited Eurofins IT Solutions, Whitefield on 7/01/2020. The objective of this meeting was to explore various avenues for classroom projects, consultancy and establishment of lab. The leadership team of Mr. Manish, VP along with solution architects gave a detailed presentation on 2 classroom projects viz Risk Intelligence and Intelligent Customer service BOT. A proposal on the similar lines is to be submitted by NHCE team for the same 7/01/2020.



ALUMNI TALK

The department of CSE organized an ALUMNI TALK on 16/01/2020 on the topic "MACHINE LEARNING". Mr. Tara Shankar, Product Lead, AWS was the guest speaker. The speaker highlighted on the different tools available for deployment and also gave an insight on basics of ML. He also spoke about various technologies.



FACULTY DEVELOPMENT PROGRAMME ON "DEEP LEARNING"

A three-day Faculty Development Programme on "DEEP LEARNING" was organized by the Department of Computer Science and Engineering in association with CSI, from 28/01/2020 to 30/01/2020. The welcome address was given by Dr. Rajalakshmi, HOD(CSE). Dr. Prashanth C.S.R, Dean Academics addressed the participants on the significance of the FDP. The Chief Guest, Mr. Sudipta Mukherjee, Director, Solution Definition and Architecture, Technical Consultant, Sutherland Global Service, Bengaluru inaugurated the FDP and shared his views on modern day deep learning techniques. This FDP incorporated various eminent resource persons from industry who engaged participants in hands on learning methods related to this novel branch of Artificial Intelligence.



STUDENT ACHIEVEMENT

Students from New Horizon College of Engineering (CSE & ISE) secured the 1st place among 10 teams in the **National Level Inter-Collegiate Tech Fest (Hackathon - organized by IBM)** conducted by Kristu Jayanthi College on 4/02/2020.

Benefits of participation:

- (1) Technical enablement from IBM
- (2) Opportunity to participate in global hackathon
- (3) Support for start-ups
- (4) Opportunity to join IBM start-up program



EXTENSION PROGRAMME

As part of NBA requirements, the department of Computer Science and Engineering organized an Extension programme titled "Cyber Security Awareness" for the students of HAL New Public School on 5/02/2020. Around 75 students and 5 teachers participated and got benefited. This programme was conducted in association with Government of Karnataka, Cyber Security Centre of Excellence - Indian Institute of Science and Department of IT-BT, Karnataka.



STUDENT CLUB ACTIVITY

Mobile Application Development Club of the Department of Computer Science and Engineering organized the event "Appatronics-2K20" on 7/02/2020- a competition with 3 rounds for promoting programming skills to enhance the employability. Around 125 students from the departments of CSE, ISE, ECE and BSH participated. Winners were awarded with certificates.



STUDENT CLUB ACTIVITY

ACE Student Club of the Department of Computer Science and Engineering organized '**CODESTORM**', a technical event with a set of problem statements and aptitude questions to kindle students' logical thinking along with time management skills on 7/02/2020.



MOTIVATIONAL TALK

The Department of Computer Science and Engineering organized Motivational Talk on "Emotional Intelligence for being smart in studies", for the IV semester students on 8/02/2020. The talk was given by **Dr. A Nagasubramaniam (WgCdr - VR)**

The salient points of the talk included:

- How student needs to develop self-awareness
- Management awareness
- Social awareness to become smart in studies



WORKSHOP ON INTRODUCTION TO ETHICAL HACKING

The Department of Computer Science and Engineering in association with HP Centre of Excellence and Computer Society of India organized a workshop on "Introduction to Ethical Hacking" on 08/02/2020 for the VI semester students. The resource person for the workshop was CSE Alumni (2018), Mr. Vinay Khande, Associate Consultant and Certified Ethical Hacker, Allstates Pvt Ltd who voluntarily came forward to conduct the workshop. Workshop gave the students an insight in the field of cyber security.



EXPERT LECTURES

The Department of Computer Science and Engineering conducted two expert lectures from Industry resource persons.

Expert lecture #1

Mr. Santosh B.G, Software developer from TCS on the topic “.NET technologies” for 6th semester A,B,C sections. He spoke about the importance of .NET technologies and their relevance in industry.

Expert lecture #2

Mr.Vinod Unnikrishnan, Product manager from Dell on the topic “Developed software testing” for 4th semester A,B,C sections. He spoke about the automated testing technologies adopted by industry. He also emphasized on the required skillset that industry looks at when it comes to testing domain.



STUDENT CLUB ACTIVITY

Business and Information Technology Club(BIT) of the Department of Computer Science and Engineering organized **TECHNOLOGIC.event**, a multi-event competition on 27/02/2020.

The following were the multi events:-

1) **Code-a-logic** : This event consisted of two rounds, viz (a) rearranging the jumbled Java & C code to get a meaningful program and (b) typing a program to execution.

2) **Digital Vernacular** : This event had two rounds, viz trends in (a) Digital marketing and (b) Social media marketing.

3) **Pop Culture Quiz** : Quizathon based on culture including arts, cinema and gaming trends.



STUDENT ACHIEVEMENT

Students of Fourth semester Computer Science and Engineering Ms. Kundana have won first position, Ms. Madhura have won second positions and Ms. Yagna have won third position, in the programming contest **Blind coding** organized by **Department of Computational and Data Sciences, IISc, Bangalore** during the Open Day 2020 on 29/02/2020



SPECIAL PLACEMENT READINESS DISCUSSION FOR THE 2017-2021 BATCH

The Department of Computer Science and Engineering arranged a special placement readiness discussion on the topic **Design Thinking and Placement Strategic Planning** for the 2017/2021 batch on 04/03/2020. The guest for this discussion was **Mr. Vinay Khande**, a certified Ethical Hacker and CCNA certified professional working as Associate Consultant in Allstate Solutions Pvt Ltd. Topics were categorized in 5 stages:

1. Aptitude tests
 - a. what we are tested for
 - b. core subjects
2. Group discussion
 - a. clarity of thought
 - b. communication skills
 - c. comprehension
3. Panel interview
 - a. preparation tips
 - b. interview mistakes
4. Tech round
 - a. coding challenges
 - b. interview strengths
5. HR interview
 - a. common questions
 - b. things in order
6. Background research



FACULTY ACHIEVEMENT

Dr. Thirukkumaran, Associate Professor, Department of Computer Science and Engineering has secured a score of 20/20 in **World Intellectual Property Day Quiz** conducted by IPR Cell and MHRD Institutions Innovation Cell of NI University 26/04/2020 .



STUDENT ACHIEVEMENT- LOWE'S CAMPUS CHALLENGE 2020

Lowe's Campus Challenge 2020 conducted on 16/04/2020. LOWE'S is a Fortune 50 product company. LOWE'S announced its first ever campus hackathon challenge in February 2020. Around 1000 teams from across the country including NIT's and top Engineering institutions participated in the challenge comprising of 3 rounds. 22 teams including 5 teams from NHCE were shortlisted for the final round. 4 teams were finally selected. Proud to share that 2 teams from NHCE are amongst the winners. NHCE bagged the 2nd place (Rs. 1 lakh cash prize) and 3rd place (Rs. 50,000 cash prize) in the Lowe's Campus Challenge 2020. Second place winners were students of 3rd year CSE branch.

Team LAD Hackers - 2nd prize

1. Divya S
2. Lakshmi M S
3. Aishwarya Kadali

Below 2 teams of CSE 3rd year reached the top 22 final list out of 1000 teams.

Team 1:

Akshay
Anurag
Abishek

Team 2:

Jehan
Aayush
Bishal



FACULTY ACHIEVEMENT

We are Happy to inform that Dr.Thirukkumaran, Associate Professor and Mr. Baskar, Assistant Professor from the Department of Computer Science and Engineering together with Professors of other college have published a patent titled "Automated Air Cooler Ceiling Fan" on 27/05/2020. Hearty congratulations to both of them.



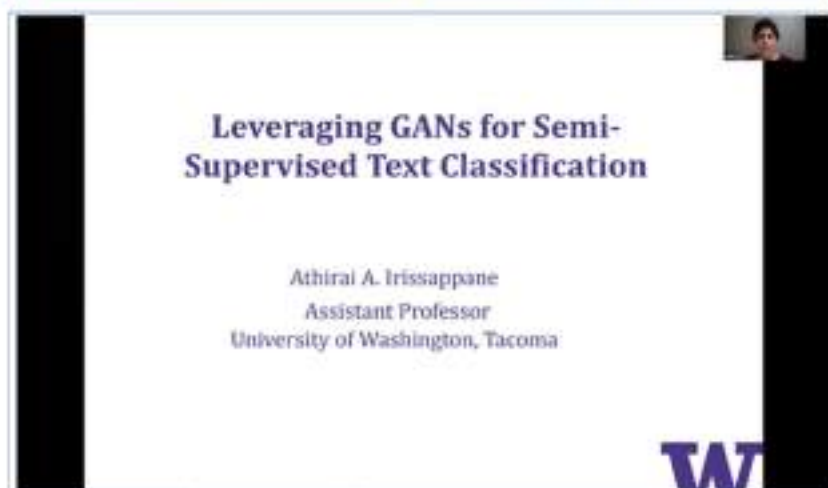
ONLINE FDP

The Departments of ECE and CSE organized a five days Online Faculty Development Program on "Image & Video processing Techniques using Python Programming" during 15th June to 20th June 2020 in association with IETE Students Forum (ISF) and Computer Society of India (CSI). This Online FDP was open to all the faculty and researchers working in various colleges and universities of India. The Speaker for the FDP was Mr. Ganesh Attarde, Founder, GB Softronics Solutions, Nashik. Around 61 Participants including faculty and researchers from various colleges and universities of India participated in this Online FDP.



WEBINAR - IBM - OBJECT AUTOMATION WEBINAR - BIG DATA & AI

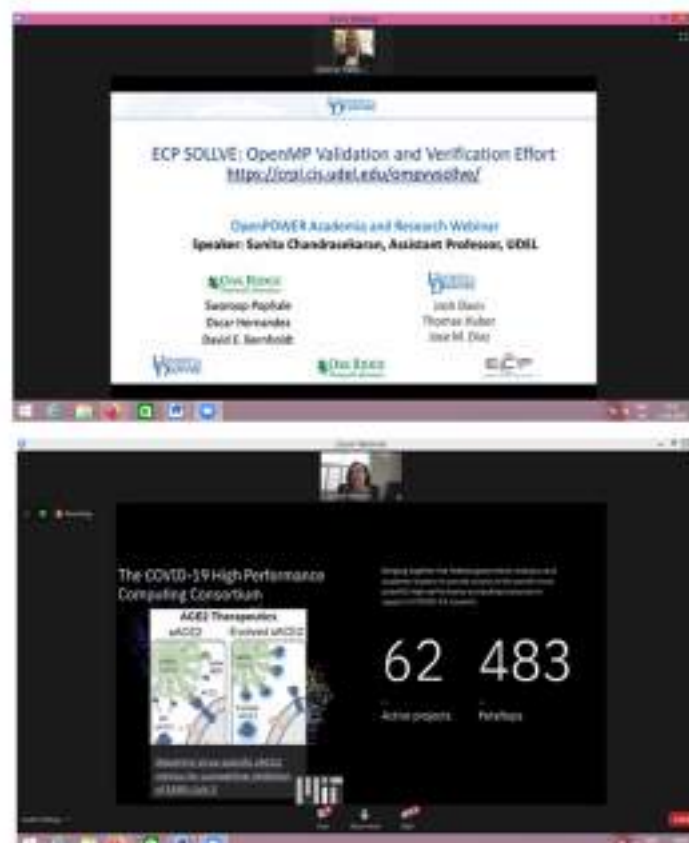
The Department of Computer Science and Engineering in association with Industry Institute Interaction Cell of NHCE , IBM OpenPOWER Center of Excellence and Computer Society of India organized online webinar titled "IBM - OBJECT AUTOMATION WEBINAR - BIG DATA & AI" on 8/06/2020. Dr. Linton Ward from IBM presented Covid-19 Response Capability with IBM Power Systems. He explained about IBM HPDA accelerates the medical research tasks ranging from biomarker detection, drug discovery, image restoration and classification, data fusion to quality control.



OpenPOWER ACADEMIA AND RESEARCH WEBINAR FROM UNIVERSITY OF DELAWARE AND IBM

The Department of Computer Science and Engineering in association with Industry Institute Interaction Cell of NHCE , IBM OpenPOWER Center of Excellence and Computer Society of India organized "OpenPOWER Academia and Research Webinar from University of Delaware and IBM" on 12/06/2020. First presentation was by Dr Sunita Chandrasekaran From University of Delaware and she shared about OpenMP (offloading) offloading Validation and Verification Test suites. Second presentation was done by Ms. Clarisse Hedglin from IBM on the title "AI @ Scale: Faster Simulations, Better Models and Smarter Deployments". Program Panelists were :-

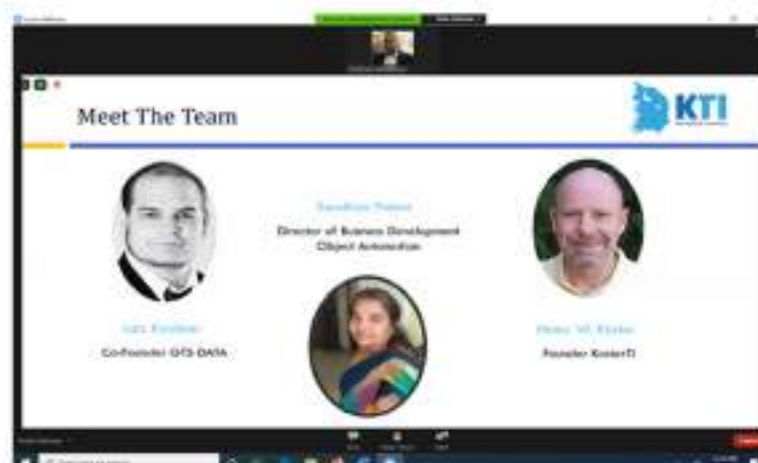
- Prof Arghya Das from University of Wisconsin, Platteville
- Prof Gopal Tadepalli from Anna University
- Prof Senthil Murugan from SRM India



OpenPOWER ACADEMIA AND RESEARCH WEBINAR FROM UNIVERSITY OF BRASILIA AND IBM

The Department of Computer Science and Engineering in association with Industry Institute Interaction Cell of NHCE, IBM OpenPOWER Center of Excellence and Computer Society of India organized "OpenPOWER Academia and Research Webinar" on 19/06/2020.

Dr Alba Cristina Melo from University of Brasilia presented on Parallel Biological Sequence Comparison in GPU Platforms. She discussed parallel biological sequence alignment with the Smith-Waterman algorithm and presented CUDAlign, which is fine-grained multi-GPU strategy to align Megabase DNA sequences in multiple GPUs. Lutz Kirchner from GTS Data was discussing about the data center and tools.

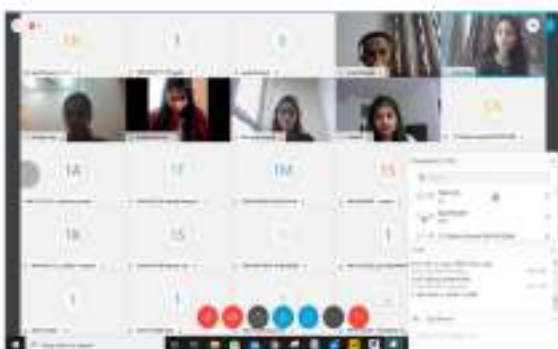


ONLINE ALUMNI MEET

The Department of Computer Science and Engineering organized an International Online Alumni Meet on 27/06/2020 from 10AM IST. The topic for the event was "Understanding Industry Needs - Challenges Faced Moving From Campus to Corporate". The invited alumni were from India and abroad. The invited alumni were:

1. Srilekha Chandrashekar - Currently working as a Senior Technology Consultant at Ernst and Young, California. Completed MS from Carnegie Mellon University in US.
2. Smithashree - Working as Senior engineer at Continental AG, Bangalore
3. Christy Lalu - Working as Senior Project Engineer at Wipro Technologies
4. Kavitha - Working with TCS as SAP Functional Consultant
5. Shivangi Anand - Working as a senior software engineer in Wipro.
6. Aishwarya Rajeev - Currently working in Amazon as a cloud associate and a certified Aws solution architect associate
7. Vinay khande - Working as a java developer at Allstate India and also a Certified Ethical Hacker.
8. Sindhusuta Mohanty - Working as an IT consultant in ITC Infotech,

Over 80 students from 4th, 6th and 8th semesters joined the meet. The session was interactive where students were eager to know about the challenges their seniors faced while transitioning from campus to corporate life.



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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ASSOCIATE EDITOR

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