Volume-1 Issue-1

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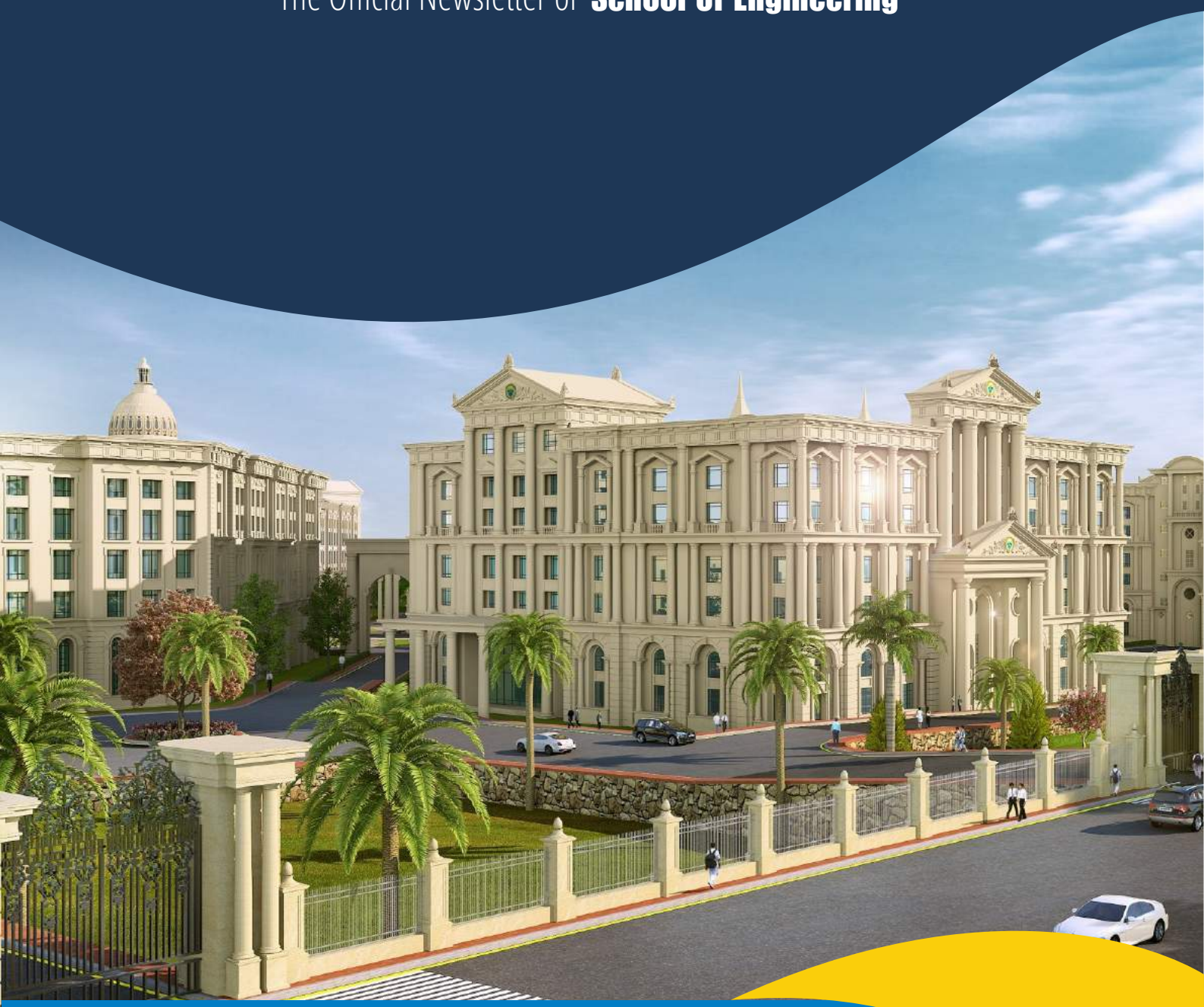
Dayananda Sagar University Bengaluru

SOE-BULLETIN

The Official Newsletter of **School of Engineering**



January 2023

www.dsu.edu.in

SCHOOL OF ENGINEERING

Vision

To Transform life through Excellence and Innovation on in Engineering Education and Research with an emphasis on Sustainable, Inclusive Technology and Global needs.

Mission

To Develop School of Engineering at Dayananda Sagar University, as Center of Excellence by imparting Quality Education and Research to generate highly Competent, Skilled and Humane manpower to face emerging Technological, Scientific and Social challenges with Ethics, Integrity, Credibility and Social concern.

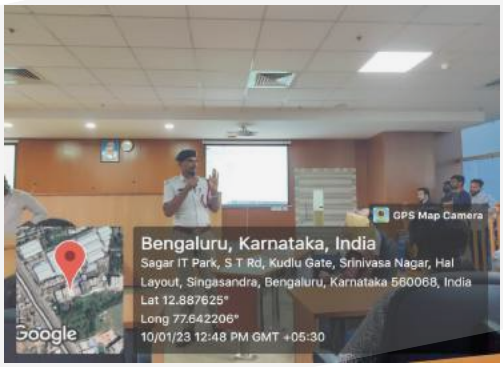
Department of Computer Science & Technology

Outreach Program on “Road Safety and Traffic Awareness

The **Department of Computer Science & Technology** And **Computer Science Engineering** conducted an Outreach Program on “Road Safety and Traffic Awareness” on **10th January 2023** for all DSU students.

Our aim is to provide road safety information for road users to encourage safer road user behavior among current and prospective road users and reduce the number of people killed and injured on our roads every year.

The speaker of the event was **Mr. Santosh, Sub. Inspector Electronic City, Bangalore.**

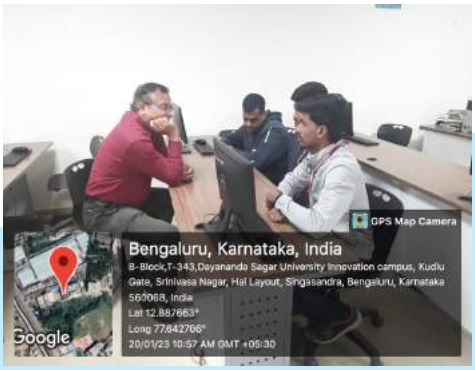


Students were **educated on the statistics for road accidents**, where Bangalore ranked second behind Delhi. As of 2010, there were 6490 accidents resulting in 791 deaths.

As it turns out, 50% of all accident victims are students which is why we need to be educated on road safety. Most students, especially those who’ve just turned 18 tend to not have a driver’s license but it is extremely important. Without a license, one wouldn’t be able to file an FIR or claim insurance.

Dr. Girisha G S, Chairman CSE and
Dr. M Shahina Parveen, Chairperson CST
have organized this event.
This event ended by thanking the speaker.

Career Counseling Interactive Session



The department of computer science & technology conducted a "**Career Counseling Interactive Session**" on **20th January 2023**, which was part of the placement improvement strategy. Prof. Baskar Venugopalan and Prof. Ramandeep Kaur interacted with unplaced students face to face and understood their problems they were facing for getting placed.
A few suggestions were given **to improve and focus**.

8th Semester Orientation Session

The Department of Computer Science & Technology conducted orientation session for **8th semester students** on **9th January 2023**. The session was organized by Prof. Baskar Venugopalan, Professor of Practice, CST.
Prof. Baskar explained the 8th semester curriculum and its importance to students.
Course objectives, outcomes, PSO, PO were discussed in details. Sir also explained about the **Major Project planning** and **review process** to students. Along with this Internships were also discussed.

DSU Sixth convocation for 2018-2022 Batch

Dayananda Sagar University's **4th Annual Convocation** was held on Wednesday, **25th January 2023**. The venue was at HAROHALLI campus.This year a total of 34 CST students' degrees were awarded.

The graduates were awarded their certificates by **Dr. Uday Kumar Reddy**, Dean SoE, and **Dr. M Shahina Parveen**, Chairperson CST. student PRANITA D, ENG18CT0023, was the gold medal winner and SAI SANJANA T, ENG18CT0027 was the silver medal winner.

STAFF ACHIEVEMENT

Dr. M. Shahina Parveen
Professor & Chairperson

Published a paper entitled "**A Survey on Automatic Text Summarization and its Techniques**" in the International Journal of Intelligent Systems and Applications in Engineering, **January 2023**

Prof. M. Chithambarathanu
Assistant Professor

Published a paper titled "**An Innovation Development of Light Weight Deep Learning Algorithm for Smart Healthcare Neural Science Management**" in Scopus Indexed International Conference on Artificial Intelligence and Knowledge Discovery in Concurrent Engineering, **January 2023. (ICECONF – 2023)**

Department of Computer Science & Engineering

Outreach Program: Road Safety and Traffic Awareness

The Department of Computer Science Engineering and Computer Science & Technology conducted an Outreach Program on "**Road Safety and Traffic Awareness**" on **10th January 2023** for all DSU students. The aim of the program is to provide road safety information for road users to encourage safer road user behavior among current and prospective road users and **reduce the number of people killed and injured** on our roads every year.

The event was organized by Dr. Girisha G S, Chairman CSE and Dr. M. Shahina Parveen, Chairperson CST. The speaker of the event was Mr. Santosh, Sub. Inspector Electronic City, Bangalore. He started **interacting with students** and **shared road safety measures** with students and their importance. He talked about the importance of road regulations to protect our lives and others.

Students **were educated on the statistics for road accidents**, where Bangalore ranked second behind Delhi. As of 2010, there were 6490 accidents resulting in 791 deaths. As it turns out, 50% of all accident victims are students which is why we need to be educated on road safety. Most students, especially those who've just **turned 18 tend to not have a driver's license** but it is extremely important. Without a license, one wouldn't be able to file an FIR or claim insurance. Being educated on road safety and traffic rules is extremely important since most people tend to be unaware of the rules and a lack of knowledge **contributes to more casualties**.

We were shown **several articles** about the accidents that have happened in Bangalore, which only further highlight the recurring severity and the harsh reality of such accidents. The students were taught about the appropriate authorities to contact in case of any concern about road safety instruments such as skywalks and zebra crossings since 50% of fatal accidents involve pedestrians. They were encouraged to write letters to the **concerned authorities** to request improvements of roads around the college.

House of Coders

Data Analytics & Visualization (DAV) Club of the Department of Computer Science Engineering conducted an event “House of Coders (HOC): upskill on Industry standards” for the **2nd and 3rd year students on 28th January 2023**. The event was organized by Dr. Girisha G S, Professor & Chairman (CSE), Dr. Basavaraj N. Hiremath Professor, Dr. Pramod Naik, Associate Professor and final year students Abhishek Krishna T M, Abhay V R, Akshay VR, Aaroodh L, Sayanthan Kumar, Yash Raj Ojha, Kavya M B, Bhagyalaxmi N Kulkarni.

Hands on Boot Camp on Full Stack Development

The Department of Computer Science Engineering conducted on Hands on Boot Camp on Full Stack Development on **30th and 31st January 2023** for all 6th Semester students. The event was organized by Bharath M B, Assistant Professor and Prof. Pooja Shree H R, Assistant Professor. Mr. Bhupendra Parihar, Trainer from Skill Lync was the speaker of the workshop. The main **objective of the workshop** was to familiarize **students with Full Stack Development**, teach basic concepts of HTML, CSS, and JavaScript and build a simple web application using APIs (Weather app). This event encourages students to participate in more boot camps which would be organized in more advanced technologies as it seems to be the **most effective method** of teaching/training.

STUDENT ACHIEVEMENTS

Mr. Mulla Suleman Basha (USN: ENG18PPCS10) Research Scholar of Computer Science and Engineering Department under the supervision of Dr Mouleeswaran SK, Associate Professor, Dept. of Computer Science & Engineering, completed his Ph.D. defence on 06/01/2023 in the Online Mode entitled " **Studies on Sampling Based Multi-Viewpoints Visual Techniques for Efficient Big Data Clustering**" and awarded by Ph.D. degree in the DSU 6th Convocation conducted on 25th January 2023.

Mr. Prasanna MSM, (USN:ENG16PPCS03) Research Scholar of Computer Science and Engineering Department under the supervision of Dr. Shaila S. G Professor & Chairperson, Data Science, Dept. of Computer Science & Engineering, completed his Ph.D. defence on 14/05/2022 in the Online Mode entitled "**Sentiment Analysis and Polarity Classification of Sarcastic and Non-Sarcastic Sentences Using Phrase and Clause Patterns**" and awarded by **Ph.D. degree** in the DSU 6th Convocation conducted on 25th January 2023.

Ms. Shubhashree P, 8th semester CSE has been recognized as Women Changemakers 2023 by She Excellence for **domain-based excellence** with talent outreach and beyond. She also participated in 'Speak for India' Debate Karnataka Edition on 17th and 18th January and stood as finalist among 227 candidates across Bangalore, Mysore, Mandya, Ramanagara for round 1 District Qualifiers and received certificates of merit for the same. She also received the **Certificate of Commitment** from the Ministry of Defense for the year 2023 (activities under Republic Day).

Ms. Chaithra K (USN ENG18CS0066) received 7th Rank with **9.04 CGPA** in the B.Tech CSE batch 2018-2022.

STUDENT ACHIEVEMENTS

Mr. K Vilohit 8th semester CSE (ENG19CS0135) along with Dr. and Mr. published paper entitled "**Improvisation Of Decision Tree Classification Performance in Breast Cancer Diagnosis using Elephant Herding Optimization**", IEEE Xplore, January 2023. This paper was done under an elective subject named UG - Research in 7th Semester.

Mr. Sharath M N, research scholar of CSE,DSU along with Dr. Rajesh T. M., Associate Professor (CSE) and Dr. Mallanagouda Patil, Associate Professor (CSE), **published patent** entitled "An efficient Optimal Metaheuristics based Pixel Selection for Video Steganography using Homomorphic Encryption approach in Indian patent, **January 2023**.

Mr. Monelli Ayyavaraiah, research scholar of CSE, DSU along with Dr. Bondu Venkateswarlu, Associate Professor (CSE) and Prof. Penugonda Ravi Kumar, Assistant Professor, Rajiv Gandhi University of Knowledge Technologies, Ap. Krishna **published patent** entitled "Ensemble Classification based COVID-19 Diagnosis from Chest X-Rays and CT Images" in Indian patent, January 2023.

Mr. C. Jayaramulu, research scholar (CSE, DSU) along with Dr. Bondu Venkateswarlu, Associate Professor (CSE) published paper entitled "**DLOT-Net: A Deep Learning Tool For Outlier Identification**" in the Proceedings of the Sixth International Conference on Electronics, Communication and Aerospace Technology (ICECA 2022) IEEE Xplore, **January 2023**.

STUDENT ACHIEVEMENTS

Mr. Subba Reddy Meruva, research scholar (CSE, DSU) along with Dr. Bondu Venkateswarlu, Associate Professor (CSE) **published paper** entitled "A Fast and Effective Tree-based Mining Technique for Extraction of High Utility Itemsets" in the Proceedings of the Sixth International Conference on Electronics, Communication and Aerospace Technology (ICECA 2022) IEEE Xplore, **January 2023**.

Ms. Arya Suresh received gold medal (1st Rank) with **CGPA 9.36** in the M.Tech CSE Batch 2018-2022.

Ms. Shazia received silver medal (2nd Rank) with CGPA **9.06** in the **M.Tech CSE** Batch 2018-2022.

Ms. Gayathri Devi Nagalapuram (USN ENG18CS0105) received gold medal (1st Rank) with **9.31 CGPA** in the B.Tech CSE batch 2018-2022.

Mr. Elwin Thomas (USN ENG18CS0098) received 8th Rank with 9.02 CGPA in the B.Tech CSE batch 2018-2022.

STUDENT ACHIEVEMENTS

Ms. Mythri J L (USN ENG18CS0179) received 2nd Rank with **9.28 CGPA** in the B.Tech CSE **batch 2018-2022.**

Ms. Vaishnavi A Punagin (USN ENG18CS0307) received 3rd Rank with **9.08 CGPA** in the B.Tech CSE batch 2018-2022.

Ms. Riya Savant (USN ENG18CS0230) received 4th Rank with **9.08 CGPA** in the B.Tech CSE batch 2018-2022.

Ms. Vansika Singh (USN ENG18CS0310) received 5th Rank with **9.05 CGPA** in the B.Tech **CSE batch 2018-2022.**

FACULTY ACHIEVEMENTS

Dr. Revathi V, Associate Professor (CSE) published patent entitled "**Glove Type Dishwashing Brush**" in Indian Patent, December 2022.

Dr. Rajesh T. M., Associate Professor (CSE) along with Mr. Sharath M N, research scholar of CSE,DSU and Dr. Mallanagouda Patil, Associate Professor (CSE), published patent entitled "**An efficient Optimal Metaheuristics based Pixel Selection for Video Steganography using Homomorphic Encryption approach**" in Indian patent, January 2023. He along with Dr. Renuka Devi M N, Dr. Shaila S G, Chairperson CSE (DS) and Prof. Cauvery Raju received best paper award in the Scopus indexed springer conference (ICAMIDA -2022) for the paper entitled "**A Novel framework for Grading of Heart Attack**".

Dr. Bondu Venkateswarlu, Associate Professor (CSE) along with Ms. Monelli Ayyavaraiah, research scholar of CSE, DSU and Prof. Penugonda Ravi Kumar, Assistant Professor, Rajiv Gandhi University of Knowledge Technologies, Ap. Krishna published patent entitled "Ensemble Classification based COVID-19 Diagnosis from Chest X-Rays and CT Images" in indian patent, January 2023. He along with Mr. C. Jayaramulu, research scholar (CSE, DSU) published paper entitled "**DLOT-Net: A Deep Learning Tool For Outlier Identification**" and with Ms. Subba Reddy Meruva, research scholar (CSE,DSU) published paper entitled "A Fast and Effective Tree-based Mining Technique for Extraction of High Utility Itemsets" in the Proceedings of the Sixth International Conference on Electronics, Communication and Aerospace Technology (ICECA 2022) IEEE Xplore, **January 2023**.

Dr. Savitha Hiremath, Associate Professor (CSE) along with Dr. Ramya R. S. DCSE, Dr. M. Shahina Parveen, Professor & Chairperson (CST), DSU, Isha Pugalia, Research Scholar (DCSE), Dr. S. H. Manjula, UVCE and Dr. Venugopal K. R., UVCE published paper entitled "**A Survey on Automatic Text Summarization and its Techniques**". In the International Journal of Intelligent Systems and Applications in Engineering,**January 2023**.

Department of Computer Science & Engineering

(Artificial Intelligence and Machine Learning)

E-commerce store

Students from **3rd semester B. Tech** have launched an **e-commerce platform "ebookzz"**, response to access this e commerce has been overwhelming.

This website **offered a wide variety** of e-books and other products related to the current trend. The website is **user-friendly and easy to navigate**, making it easy for customers to find what they are looking for.

STAFF ACHIEVEMENT

Paper Publication:

1. Dr. Jayavrunda has published paper Titled "A Comparative Analysis of Machine Learning Algorithms for Agricultural Drought Forecasting", IEEE Xplore.

1. **Prof. Raghavendra has published paper in Springer paper titled "**EAP Based Certificateless Authentication Technique to Access Cloud Services in Open stack**"** DOI: 10.1007/978-3-031-22405-8_12.
2. **Dr. Monika Goyal** Has Reviewed papers in All India Council for Technical Education (AICTE) Sponsored and Scopus- indexed INTERNATIONAL Journal JDMSCSP22.
3. **Dr. Monika Goyal** Reviewed papers in the 3rd International Conference on Computer Vision and Robotics (CVR 2023) Organized in In-person and Online (Hybrid Mode) by Babu Banarasi Das University Lucknow, India Technically Sponsored by Soft Computing Research Society, February 24-25, 2023.

Department of Computer Science & Engineering

(Cyber Security)

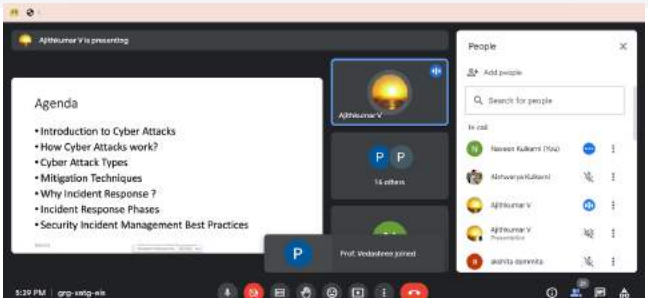
Industry Visit – Cognizant, Bangalore

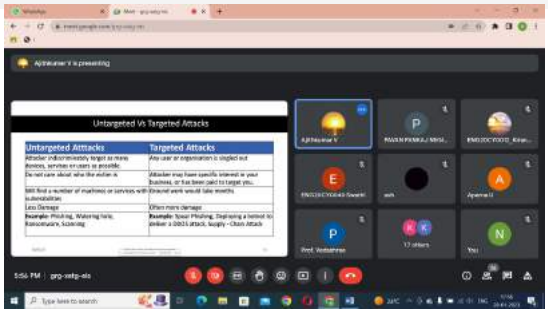
Chairman, Department of Computer Science and Engineering (Cyber Security), Dr. Kiran B. Malagi along with chairperson of Department of Computer Science and Engineering (Data Science) Dr. Shaila S. G. and Placement officer Prof. Vijaykumar attended Cognizant launches Reverence - **Faculty Enrichment Program on 10 January 2023.**

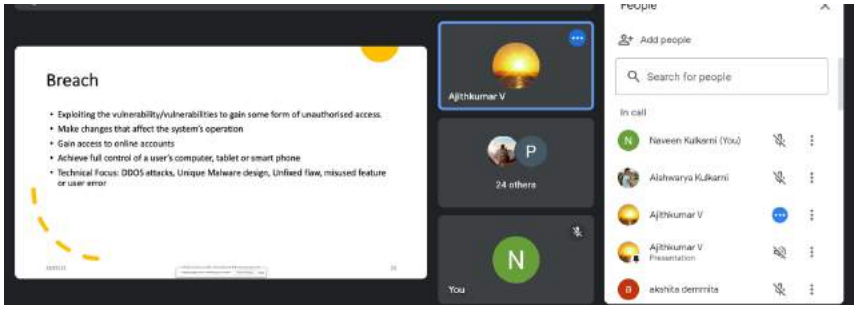
Webinar: Cybersecurity – Incident Management

Department of Computer Science and Engineering (Cybersecurity) organized webinar on "**Cyber Security – Incident Management**" on **28th January, 2023** from 5.30pm to 8pm for 1st year and 3rd year students of Cyber Security. Speaker Dr. Ajith Kumar V. discussed important **key points learn in Incident Management**. Prof. Naveen Kulkarni, Prof. Vedashree coordinated the webinar.

Photos of this event:







Department of Computer Science & Engineering

(Data Science)

Faculty Enrichment Program on “Cognizant Digital Nurture Reverence"

From the Department of Computer Science and Engineering (Data Science), Dr Shaila S G, Professor and Chairperson have attended the Faculty Enrichment Program organized by the Cognizant, Bangalore.
The aim is to learn from the academia while empowering a team of teaching faculties with effective industry insights has now gained momentum with the launch of the program and together can drive it to success.

The launch event provided a clear vision of the reverence journey that awaits us ahead. They were grateful for the insights shared during the event as it truly enhanced our understanding and was a great learning opportunity for all of us. Inputs were valued as they will help to refine this program to best fit your learning expectations.

Faculty attended: Dr Shaila S G, Professor and Chairperson, Dept. of CSE (DS)

Recent Advances in Data Structures for Data Science Applications

The Data Science @ DSU club, Department of CSE (Data Science) and in association with CSI has successfully organized a value-added course on “Recent Advances in Data Structures for Data Science Applications" on 11th January, 2023. The targeted audience were 3rd semester students. Around 30+ students participated in the Value-added course. The speaker gave an insight of Recent Advances in Data Structures to the students. The organizers of this event are Dr. Shaila S G, professor and Chairperson, Prof. Monish L and Prof. Sindhu A Assistant Professor, Dept. of CSE(DS).

Resource Person: In House Faculties:

1. Dr. Kakoli Bora, Associate Professor, Dept. of CSE (DS)
2. Prof. Sindhu A, Assistant Professor, Dept. of CSE (DS)

Photos in the event:

STAFF ACHIEVEMENT

Mr. Prasanna MSM

Research Scholar completed his Ph. D in Computer Science and Engineering, under the supervision of **Dr. Shaila S G**, Professor and Chairperson, Data Science on "Sentiment Analysis and Polarity Classification of Sarcastic and Non-Sarcastic Sentences Using Phrase and Clause Patterns" and awarded Convocation on 25th January 2023.

1. **Prof. Shivamma D** has attended a 3 Days Faculty Development Program organized by Dayananda Sagar College of Arts, Science and Commerce, Bangalore on 18th to 20th January 2023

1. **Prof. Sindhu A** completed the online course “Getting Started with NodeJS” from SkillUp by Simplilearn on 31st January 2023.

1. **Shaila SG, Monish L,** Sumana SG (Accepted) - “Emotion Classification Based on Eeg Signals: A Comprehensive Study” in Emerging Research in Computing, Information, Communication and Applications" (ERCICA-2023), Springer.

1. **Dr. Kakoli Bora** completed the course “Mathematical Foundations of Machine Learning” from Udemy on 31st January 2023

Department of Electronics & Communication Engineering

STAFF ACHIEVEMENT

Paper Publication

1.Suchandana Mishra, P. Sharan, K. Saara (2023), "**Optomechanical behavior of optical sensor for measurement of Wagon weight at different speeds of the train**" Journal of Optics, Springer, published online on 7 January 2023.
2. Ranjith B. Gowda, P. Sharan, K. Saara (2023), "**1-Dimensional silicon photonic crystal pressure sensor for the measurement of low pressure**" Results in Optics, Elsevier Journal, published online on 4 January 2023.

PhD completion

Mukti Chaturvedi has been awarded the **Degree of PhD** under the guidance of Dr. Arungalai Vendan S, Professor, Dept. of ECE, SOE, DSU. Her domain of study was **Material joining using advanced welding technique.**

Prof Abhinav Karan invited as Subject expert to LG, Bangalore

Prof Abhinav Karan, Assistant Professor has been **empaneled as a subject matter expert** at LG, Bangalore campus in the field of "**Natural Language Processing**". He was invited recently on **30/01/23 & 31/01/23** to train some of their employees to make them aware about the recent developments in NLP that can be incorporated in their on-going project.

Department of Computer Applications

Soft Skills Workshop

Soft skills training provides students with the opportunity to gain skills particular to their subject or industry of choice in addition to the employability skills i.e. soft skills that are required for real-life work. Soft skills include communication skills and body language. In view of this Dr. Sandhya Madhuri, Assistant Professor, in-house faculty and Samvāda club-coordinator has conducted a workshop on "**Formal vs Informal conversations**" on **20.01.2023**. The attendees are 1st semester MCA students. All the students participated actively in the session. The feedback received for the session is good. And they have requested to conduct **more such sessions in future**.

IOT Mini Exhibition

The **inauguration** of the **MCA III Sem mini IOT Exhibition** event was held on 27-01-2023, the Chairperson of Computer Applications Dr. Vasanthi Kumari P inaugurated the event.
Showcasing the student's ideas and skills were the main objective of the IOT Exhibition and thereby enhancing the project quality as per the need of industry, with this in mind DEPARTMENT OF COMPUTER APPLICATIONS has initiated the concept of IOT Exhibition for MCA III Sem students.
The **Chairperson addressed the gathering** with very knowledgeable insights and well encouraging words that gave an exposure to students on how to learn outcomes of the projects and striving hard to reach end users and how projects should impact the society.
The event was fully videographed, solely by the student volunteers. The function generated a **high degree of excitement in the faculty and students and was a great success**. The students are motivated by giving the best 3 projects in the competition. The co-convenors of this event are Prof.Kishore S and Dr.Rekha.R.Nair, Assistant Professor of Computer Application.

Orientation program for 1st year MCA students

Department of Computer Applications conducted '**Orientation program**' for new entrants of 1st year MCA students on **18th January 2023** at 9.30 AM at Gallery Hall, Block A. Students were welcomed by the class advisor, Prof.Padmageetha BG followed by the orientation by Dr.Vasantha Kumari madam, Chairperson, Dept. of CA. The students **got the insight of the DSU and academic information in depth**. Other faculty members spoke about the various club activities. Few final year MCA students shared their experience of their stay. The session was ended by refreshment.

Tech Talk

A one-day technical talk on "**Trace of IT over a decade**" was organized by the CA department at the gallery hall-3 on Tuesday, **19th Jan 2023**. Dr. Vasanthi Kumari P (HOD, CA department) welcomed the guest and introduced the programme to all. The technical talk was chaired by Mr. Srikanth, Founder/Director of Executables Pvt. Ltd. On account of the technical talk on "Trace of IT over a decade" the resource person spoke briefly on emerging trends on evolving data & development with the recent technologies and also told about programming skills that students require to **compete in the emerging technical world**. He motivated the students to eagerly participate in the events. The technical talk was very interesting and gave the opportunity to discuss recent technologies. The basic idea of this event is to enhance the knowledge about Mobile applications to all the participants. The program was successfully concluded with **a formal vote of thanks** by Prof. Padma Geetha, Associate Professor to the resource person and to all the participants.

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