

# BITS & BYTES

**VOLUME 2, ISSUE 1** 

# CANGINEERING COLLEGE

"Sudhindra Nagara" Benjanapadavu Bantwal Taluk Mangaluru Karnataka, INDIA

#### **DEPARTMENT OF**

# COMPUTER SCIENCE AND DESIGN



- FacultyAchievements
- Departmental Activities
- Student Achivements
- Department Stars



# **EDITORIAL**



Dr. Praahas Amin Associate Prof. & HOD Dept. of CSD



Dr. Demian Antony D'Mello Professor & Dean Academics



MrS. Chatura V Karadesai Assistant prof. Dept. of CSD

### STUDENT MEMBERS



Goutham Pai Co-ordinator



M.Shridevi Prabhu Designer



Shwetha Ravindra Baliga Content Writer



**Srinidhi R**Content Writer



Deekshith Nayak



Harshitha A Pai



V Shankara Thejaswi



Swasthik Gambheer

#### **VISION**

To be a globally competent center in Computer Science and Design committed to produce a pool of knowledgeable engineers to extend solutions for the mankind in the field of software and design.

#### **MISSION**

- Provide the environment to become industry ready Professionals, Researchers and Entrepreneurs by offering emerging courses.
- Imparting experiential learning to gain proficiency in contemporary software and design tools to meet the current demands of the industries.
- Develop teamwork and problem-solving abilities, foster lifelong learning and instill sense of ethical and societal responsibility among students.

#### **DEPARTMENT PROFILE**

The department was started in the year 2021 to offer under graduate degree programme i.e. Bachelor of Engineering (BE) in Computer Science & Design (CS&D). To guide the students with their academics, the department includes enthusiastic, skilled, and experienced teaching members. The faculty members are actively involved in teaching, product development and research.

The faculty members have published number of research and review papers/articles in referred International journals and reputed International conferences which are archived at IEEE/ACM/Springer and other renowned digital libraries.

A course in computer science and design is related to a course in computer science and engineering, which emphasises not only computing technologies, software, programming, and tools but also various design techniques and interaction approaches. The program's goal is to provide students with an interdisciplinary skill set that will allow them to succeed in a variety of industries, including the information technology field, animation, virtual reality, augmented reality, multimedia, robotics, game development, entertainment, and digital analytics, among others.

The faculty frequently attends staff development programmes (SDP/FDP/Seminar) to update themselves in technological advancements and conferences to present research findings. The department aims at building the students' career by placing special emphasis on all-round development through continuous interaction with Industry. To increase the opportunity of placements to students, the department conducts soft skills training programmes, technical skill development activities and initiatives on self-learning (Spoken Tutorial programmes by IIT Bombay).

#### **PROGRAMME EDUCATIONAL OBJECTIVES (PEO)**

- Exhibit the knowledge and skill sets to acclimatize to the significant technical innovations and modifications in the field of computer science and design.
- Become accustomed to a corporate work atmosphere, carrying out assigned tasks with competence, and being able to keep up with new technology developments to launch start-ups and research.
- Engage in inventive work to capitalize on novel ideas for enhancing socio-economical values of the mankind.

#### **PROGRAMME OUTCOMES (PO)**

Engineering graduates in Computer Science and Design will be able to:

- **Engineering knowledge**: Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.
- Problem analysis: Identify, formulate, review research literature and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.
- **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal and environmental considerations.
- Conduct investigations of complex problems: Use research-based knowledge and research methods, including design of experiments, analysis and interpretation of data and synthesis of the information to provide valid conclusions.
- Modern tool usage: Select/Create and apply appropriate techniques, resources and modern
  engineering and IT tools, including prediction and modelling to complex engineering activities, taking
  comprehensive cognizance of their limitations.
- The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- Environment and Sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts and demonstrate the knowledge of and need for sustainable development.
- Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the relevant scientific and/or engineering practices.
- Individual and team work: Function effectively as an individual and as a member or leader in diverse teams and in multidisciplinary settings.
- **Communication:** Communicate effectively on complex engineering activities with the engineering community and with the society-at-large, such as being able to comprehend and write effective reports and design documentation, make effective presentations and give and receive clear instructions.
- **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work as a member and leader in a team to manage projects and in multidisciplinary environments.

• **Life-long learning**: Recognize the need for and above have the preparation and ability to engage in independent and life-long learning in the broadcast context of technological changes.

#### **PROGRAMME SPECIFIC OUTCOMES (PSO)**

- Apply designing principles and mathematical concepts to make the students well-versed with full stack applications.
- Design and develop computer programs/computer-based systems in various areas of Multimedia, Graphics and User Interface.

#### **FACULTY ACHIEVEMENTS**



**Dr. Praahas Amin** 

🏅 Dr. Praahas Amin Successfully Earns PhD

Dr. Praahas Amin achieved a milestone by proficiently defending the Ph.D. thesis titled "Design of Myoelectric Control System Based on Machine Learning Techniques" during the Ph.D. Open Viva Voce, which transpired on September 2nd, 2023, at Mangalore University.

Deep Learning Based Gesture Recognition System using EMG Spectrogram Data

Presented a research paper titled Deep Learning Based Gesture Recognition System using EMG Spectrogram Data at the 7th International Conference on Information and Communication Technology for Intelligent Systems held at Ahmedabad on April 27th and 28th, 2023. The paper has been accepted for publication in Springer Lecture Notes in Networks and Systems Vol. 719 - ICT with Intelligent Applications.



**X** Attended: Data Science – Industry and Academia Perspectives

Attended a 5-Day Faculty Development Program on "Data Science Industry and Academia Perspectives", organized by Department of Artificial Intelligence and Data Science Engineering in association with the Internal Quality Assurance Cell (IQAC) and Nitte Engineering Education Unit (NEEU) from 13th March to 17th March 2023 at NMAMIT, Nitte.



#### Mr. Anantha Krishna Kamath

7 NPTEL Domain Certification in Data Science

Congratulations to Mr. Anantha Krishna Kamath, Assistant Professor in Computer Science and Design, for earning the NPTEL domain certification in Data Science (Computer Science). Completing six challenging courses in under two years is a commendable achievement, reflecting his dedication and expertise in these fields.



#### Mr. Gurusandesh M

**℧** Certificate In OpenCV

ratulations to Mr. Guru Sandesh M, Assistant Professor in Computer Science and Design, for earning an official certificate in OpenCV, proving he's serious about staying on top of computer vision tech. This AICTE-recognized program shows his dedication to bringing cutting-edge knowledge to his students.



#### Mrs.Chatura V Karadesai

🏅 Completed a 5-day program on cloud computing and AWS

Congratulations to Mrs.Chatura V Karadesai, Assistant Professor in Computer Science and Design, for completing a 5-day program on cloud computing and Amazon Web Services (AWS). This experience equips them with valuable knowledge to integrate cloud technology into their teaching and research.

**Y** Completed "Introduction to Machine Learning" course offered by NPTEL

Congratulations to Mrs.Chatura V Karadesai, Assistant Professor in Computer Science and Design, for completing the "Introduction to Machine Learning" course offered by NPTEL, demonstrating their commitment to expanding their knowledge in this rapidly evolving field. Their score of 54% reflects their hard work and dedication, and positions them well to explore the exciting applications of machine learning.

**Y** Certificate In OpenCV

Congratulations to Mrs. Chatura V Karadesai, Assistant Professor in Computer Science and Design, for earning an official certificate in OpenCV, proving he's serious about staying on top of computer vision tech. This AICTE-recognized program shows his dedication to bringing cutting-edge knowledge to his students.



**Y** Certificate In OpenCV

Congratulations to Mr. M H Soorajprasad, Assistant Professor in Computer Science and Design, for earning an official certificate in OpenCV, proving he's serious about staying on top of computer vision tech. This AICTE-recognized program shows his dedication to bringing cutting-edge knowledge to his students.

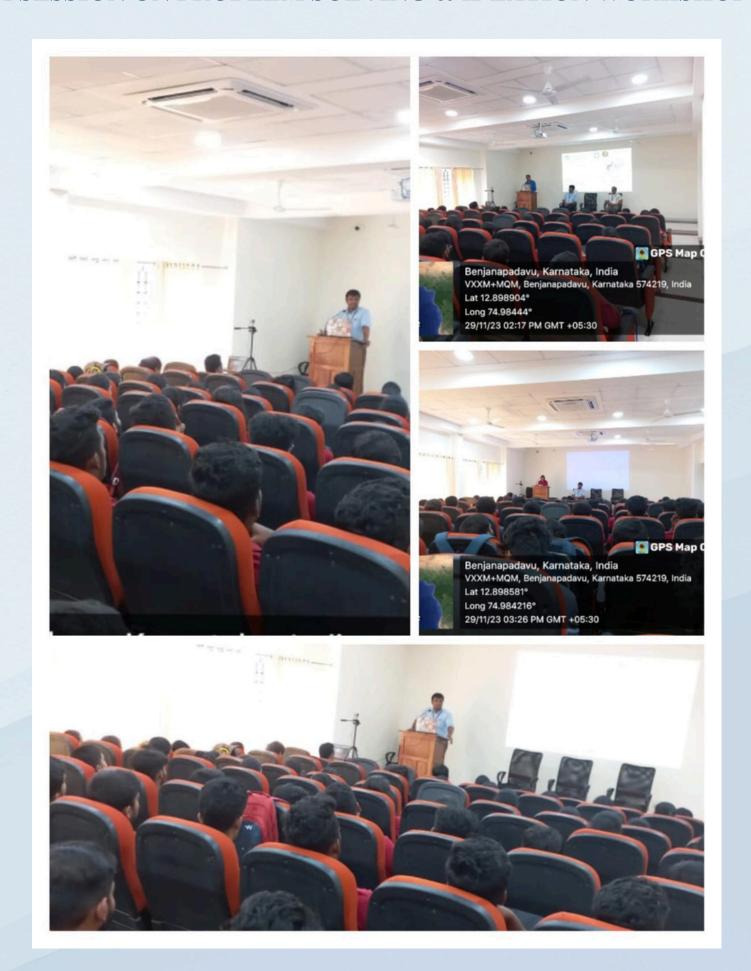
#### **DEPARTMENTAL ACTIVITIES**

#### A session on PROBLEM SOLVING & IDEATION WORKSHOP:

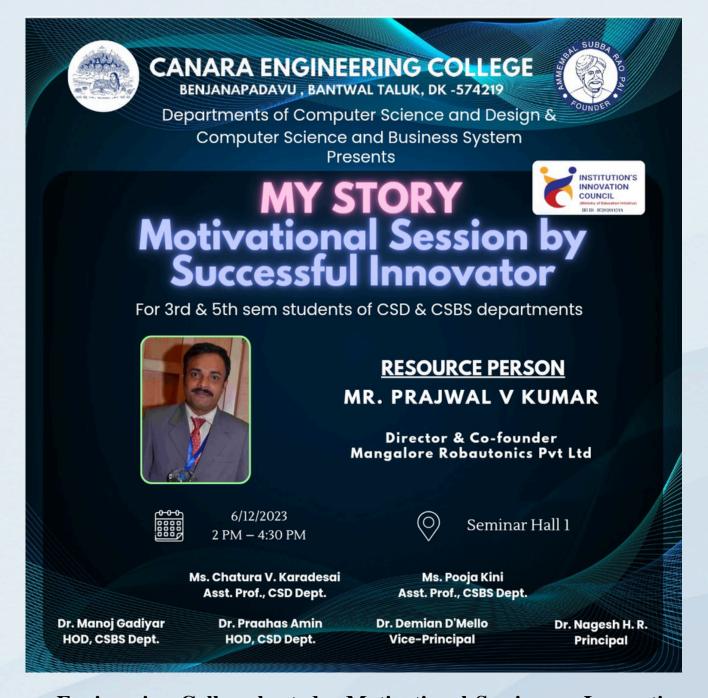


The Department of Computer Science and Design at Canara Engineering College successfully conducted a "Problem Solving & Ideation Workshop" on November 29, 2023. The resource person for the event was Dr. Praahas Amin, HOD of the Computer Science & Design Department and Managing Director of Flashflow Technologies OPC Pvt. Ltd. The event aimed to enhance problem-solving skills and encourage entrepreneurial mindset. The workshop's success enhanced problem-solving capabilities among the students.

#### A SESSION ON PROBLEM SOLVING & IDEATION WORKSHOP:



#### A MOTIVATIONAL SESSION BY SUCCESSFUL INNOVATOR:



Canara Engineering College hosted a Motivational Session on Innovation and Entrepreneurship, organized by the Departments of Computer Science and Design, and Computer Science and Business System. The event "My Story - Institution's Innovation Council," featured Mr. Prajwal V Kumar, Director & Co-founder of Mangalore Robautonics Pvt Ltd, as the resource person. Conducted on Tuesday, December 6, 2023, the session was tailored for 3rd and 5th semester students of the CSD & CSBS departments. Mr. Kumar shared his entrepreneurial journey and experiences, offering valuable insights to inspire the attending students. The session successfully concluded, leaving a positive impact on the participants' understanding of innovation and entrepreneurship.

#### A MOTIVATIONAL SESSION BY SUCCESSFUL INNOVATOR:





#### STUDENT ACHIVEMENETS



Runner-Up in VTU State Level Badminton Championship

Participant in VTU Mangaluru Division Inter-Collegiate Throwball

Tournament

Poorva Kumari achieved 2nd place at the VTU State Badminton Inter Collegiate Mangaluru Division Level Tournament held at NMAMIT, Nitte in July, 2023 and actively participated in the VTU Mangaluru Division Inter-Collegiate Throwball Tournament in February 2024.



**Participated in the Smart Nitte Hackathon** 

Harshita from the 3rd semester participated in the Smart Nitte Hackathon held on November 25 and 26. The event featured ten challenging problem statements, and after a successful abstract submission in the first round, Harshita and her team earned a coveted spot in the two-day national hackathon. The core of the event was a rigorous 24-hour hackathon where participants, including Harshita, showcased their problem-solving skills and dedication to innovation. Harshita's active involvement exemplified the commitment and enthusiasm of students in embracing challenges and contributing to the spirit of technological advancement.



#### Mahima U.S.

Mahima U.S., a student in the Computer Science and Design department, delivered a captivating solo classical dance performance as part of the NAAC visit at Canara Engineering College. She participated in the Nitteorganized Hackathon, earning a place among the top 50 teams. This accomplishment granted her the opportunity to participate in a rigorous 24-hour hackathon hosted at NMAM Institute of Technology, Nitte. She took part in the solo dance competition during the National-level Techno-Cultural Fest held at VTU Belgaum.



#### Rakshitha B Bhajentri

Tearns Runner-Up Distinction at NDLI-IEEE "Problem Scaping" Event

Rakshitha B Bhajentri demonstrated exceptional problem-solving prowess at the joint NDLI and IEEE "problem scaping" event on March 11th, 2023. Her insightful approach and innovative solutions earned her a well-deserved runner-up finish, showcasing her dedication and aptitude in tackling complex challenges.





# Purag P Rai

## Prakrithi Sujir



1st Runner-up at the NITTE Healthcare Innovation Hackathon

At the NITTE Healthcare Innovation Hackathon-2023, organized by Nitte (Deemed to be University) and other esteemed institutions, Purag and Prakrithi clinched the 1st Runner-up position, showcasing remarkable innovation and problem-solving skills in the healthcare sector. This event, held from 5th to 7th May 2023 at AIC Nitte Incubation Centre.



1st Prize in The Pirchers Category at 'CODEBLAZE'

Purag and Prakrithi excelled at 'CODEBLAZE' hosted at Sahyadri College of Engineering and Management on 7th, 8th, and 9th December 2023. Purag and Prakrithi has seized the 1st Prize in The Pitchers category, demonstrating pitching innovative ideas.



Achala Padmar



**\*** Participated in te UI Battle Competition

Achala participates in the UI Battle competition held as part of the Sahyadri Synergia festival. Demonstrating both passion and technical prowess, Achala contributed her skills to the event, showcasing a commitment to excellence within the vibrant atmosphere of the festival.



Rakshitha B Bhajentri



Adithi N



Shreya JH

🧎 Kabaddi Tournament: VTU Inter Collegiate state level kabaddi tournament

Rakshitha B Bhajentri showcased her talent in kabaddi by securing 4th place at the recent state-level tournament on August 2-3, earning well-deserved recognition. Meanwhile, Shreya J H excelled in various competitions, securing 2nd place in the VTU Inter-collegiate Rest of Bangalore division tournament on July 31, 2023, 2nd runner-up in the VTU state-level tournament on August 2, 2023, and 1st runner-up in the State Level Inter-Collegiate Kabaddi Tournament on December 22, 2023, at BMSCE, Bangalore. In the same competitive spirit, Aditi N displayed remarkable skill, securing the runner-up position between July 31 and August 1, 2023. Her impressive performance adds to the list of notable achievements in the dynamic realm of kabaddi, highlighting the dedication and talent of these athletes.







Adithi N

Shreya Rao

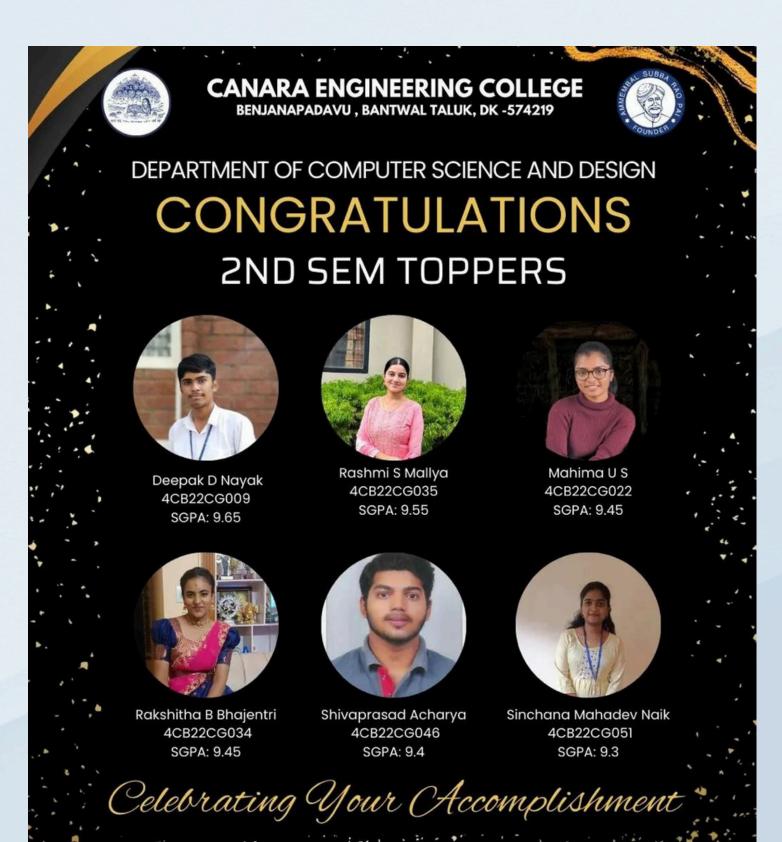
**♥**1st Place: Shreya Rao and Aditin N's Triumph in Nartan Group Dance at Yukti Fest''

Shreya Rao and Aditin N, part of a standout group from the Computer Science and Design department, secured first place at the Nartan group dance event during Yukti Fest at VTU Belagavi, showcasing their prowess in classical dance.



#### **DEPARTMENT STAR**

canaraengineering.in





## CANARA ENGINEERING COLLEGE BENJANAPADAVU, BANTWAL TALUK, DK -574219



DEPARTMENT OF COMPUTER SCIENCE AND DESIGN

## CONGRATULATIONS **2ND SEM TOPPERS**



Anusha Vittal Pandit 4CB22CG001 SGPA: 9.25



Sanjana Karanth U 4CB22CG041 SGPA: 9.25



Harshitha A Pai 4CB22CG012 SGPA: 9.1



Mehek Rajesh Kelaskar 4CB22CG023 SGPA: 9.05



Dhanashri Govind Isloor 4CB22CG010 SGPA: 9



Praveena Prakash Gunaga 4CB22CG030

Celebrating Your Accomplishment



canaraengineering.in











BIJSEBUTES

In a moment of great pride, we extend our warmest congratulations to the 12 brilliant students of the Computer Science and Engineering Department, 2nd semester, who have achieved a commendable CGPA above nine. Their exceptional dedication and academic excellence have illuminated our department, making us beam with pride.

We take this opportunity to applaud their hard work and commitment, which undoubtedly sets a high standard for their peers. These students have not only excelled individually but have also brought honor to our esteemed department.

As we celebrate their success, we look forward to witnessing their continued achievements in the future. Join us in acknowledging and celebrating these outstanding scholars whose accomplishments have added a shining chapter to the story of our department's success.

Congratulations once again!



**CANARA ENGINEERING COLLEGE** 

BENJANAPADAVU, BANTWAL TALUK, DK -574219



Department of Computer Science & Design

# Congratulations! 4th Sem Toppers



KAMATH VAISHNAVI RAMACHANDRA 4CB2ICG024 SGPA: 9.41



SHWETHA RAVINDRA BALIGA 4CB21CG052 SGPA: 9.32



NAVYA 4CB21CG030 SGPA: 9.23



RAMYA RAMACHANDRA ACHARI 4CB2ICG040 SGPA: 9.23



SHAMITH KUMAR SHETTY 4CB2ICG047 SGPA: 9.18



SINDHOO N. S. 4CB21CG053 SGPA: 9.18



PRABUDDH SHETTY 4CB2ICG034 SGPA: 9.09



ADITHI N. 4CB21CG004 SGPA: 9.05

Opportunities don't happen you create them!



canaraengineering.in











With immense pride and joy, we extend our heartfelt congratulations to the eight outstanding students from the Computer Science and Engineering Department, 5th semester, who have achieved a remarkable CGPA above nine. Their exceptional academic prowess is a testament to their hard work, dedication, and passion for excellence.

In recognizing and celebrating their accomplishments, we acknowledge the significant impact these students have made on the academic landscape of our department. Their commitment to excellence not only reflects positively on their individual journeys but also adds to the prestige of our esteemed department.

As we applaud these students for their outstanding achievements, we look forward with anticipation to the bright futures they are sure to carve for themselves. Their success serves as an inspiration for their peers and a source of pride for our entire department. Join us in congratulating these remarkable scholars as they continue to set the bar high and make us proud. Congratulations to each of them on this well-deserved accomplishment!

#### Department Of Computer Science and Design

# BITS & BYTES

Dive into the world of innovation and excellence with Computer Science and Design from Canara Engineering College. Unveil the latest in Computer Science and Design through captivating articles, student and faculty achievements, and a glimpse into our vibrant department.

#### Discover Our Vision \*

At CS&D, we're on a mission to produce industry-ready professionals, researchers, and entrepreneurs. Join us as we explore emerging courses, modern tools, and the future of software and design.

#### 🚀 Program Highlights 🚀

Our interdisciplinary program equips students with versatile skills designed to excel in diverse professional arenas. Explore the capabilities that define our program.

#### **1** Journey with Us

Explore the impact of professional engineering solutions in society and the environment. Engage with our community of learners, and witness the spirit of innovation that defines CS&D.