



BMS INSTITUTE OF TECHNOLOGY & MANAGEMENT

Autonomous Institute Under VTU, Accredited by NBA and NAAC

Yelahanka, Bengaluru-560119.

Name of the Society:

IEEE Computer Society, BMSIT&M Student Branch

Date of Formation:

Coordinator:

Mrs. Bharti R.

Faculty Advisor, IEEE Computer Society

BMS Institute of Technology & Management

Objective:

To promote technical excellence among students by fostering problem-solving abilities, logical reasoning, and competitive programming skills through structured coding events and collaborative learning experiences.

Frequency of Meetings:

Two core team meetings per month and an Annual General Meeting with all IEEE Computer Society members.

Social Media Links:

LinkedIn: <https://www.linkedin.com/company/ieee-cs-bmsit/posts/?feedView=all>

Instagram: <https://www.instagram.com/ieeecs.bmsit/>

Roles and Responsibilities:

IEEE Computer Society, BMSIT&M Student Branch serves as a dynamic technical community dedicated to enhancing students' knowledge in computer science and related domains. The society organizes coding competitions, technical workshops, outreach programs, and large-scale initiatives to encourage innovation, peer learning, and industry readiness. Members actively

collaborate to plan events, manage operations, conduct technical sessions, and represent the chapter at institutional and inter-college levels.

Activities Conducted:

CodeCon'24 – Competitive Coding Event

Date:

15th November 2024

Venue:

APJ Abdul Kalam Lab, 4th Floor, Lab Block,
BMS Institute of Technology & Management, Bengaluru

Participants:

120+ students participated in teams from various branches

Prize Pool:

₹3000/-

CodeCon'24 was a full-day competitive coding event organized by the IEEE Computer Society, BMSIT&M Student Branch. The event aimed to test participants' aptitude, debugging skills, and algorithmic thinking through a structured multi-round competition. The event provided a competitive yet collaborative environment where students could showcase their programming expertise while engaging in peer learning and healthy competition.

Round 1 – Aptitude Quiz:

Participants attempted a rapid-fire quiz focusing on logical reasoning, general aptitude, and basic technical concepts.

- Duration: 15–20 minutes
- Outcome: Top 30 teams qualified for the next round

Round 2 – Debugging Round:

Teams were required to identify and correct errors in pre-written code snippets, testing their understanding of programming fundamentals.

- Duration: 20–25 minutes
- Outcome: Top 10 teams advanced to the final round

Round 3 – Competitive Coding:

The final round consisted of a one-hour coding challenge hosted on HackerRank. Participants

solved algorithmically intensive problems that evaluated efficiency, correctness, and coding speed. Winners were declared based on score and time taken.

Winners:

- **1st Place:** Team Dettol
- **2nd Place:** Team Kasukabe Defence Squad
- **3rd Place:** Team Blue Lock

CodeCon'24 was successfully conducted with enthusiastic participation from students across disciplines. The event strengthened the competitive coding culture within the campus and reinforced IEEE Computer Society's commitment to technical excellence, innovation, and skill development among students.



Hack the Halls – Two-Day Coding Challenge

Date:

23rd & 24th December 2024

Venue:

APJ Abdul Kalam Lab, 4th Floor, Lab Block,
BMS Institute of Technology & Management, Bengaluru

Participants:

140+ participants forming 35 teams

Prize Pool:

₹7,000/-

Hack the Halls was a two-day technical coding event organized jointly by the IEEE Computer Society and IEEE Information Theory Society, BMSIT&M Student Branch. The event uniquely blended technical rigor with a festive atmosphere, offering participants an opportunity to enhance their debugging and coding skills while engaging in teamwork and creative problem-solving.

Day 1 – Debugging Round:

The first day focused on structured debugging challenges designed to evaluate participants' understanding of programming fundamentals and advanced problem-solving skills.

- **Icebreaker Session:**

The event commenced with an interactive ice-breaking session, creating a lively and engaging environment for participants. The session helped foster camaraderie and enthusiasm among teams.

- **Round 1:**

Participants solved 10 basic debugging problems.

- Scoring: 2 points per problem

- Duration: 40 minutes

- **Round 2:**

This round featured 5 moderately challenging debugging problems.

- Scoring: 3 points per problem

- Duration: 30 minutes

- **Round 3:**

The final debugging round consisted of 3 advanced-level problems requiring critical thinking and deep conceptual understanding.

- Scoring: 5 points per problem
- Duration: 40 minutes

Based on cumulative scores across all rounds, the **top 15 teams** qualified for Day 2.

Day 2 – Code Roulette:

The second day emphasized creativity, collaboration, and rapid development.

- Teams were assigned a theme at the start of the session to ensure fairness.
- A brainstorming period allowed teams to plan strategies and divide responsibilities.
- Coding responsibilities were rotated among team members, with regular evaluations conducted by the technical team.
- Mini-games were organized alongside coding rounds to maintain participant engagement.

After evaluations, the **top 5 teams** were shortlisted based on:

- Practicality
- Completeness
- Appearance
- Functionality

Each criterion was scored out of 10.

The shortlisted teams presented their projects in the final round, focusing on innovation, feasibility, and technical execution.

- **1st Place:** Inglorious Bastards – ₹4,000
- **2nd Place:** Los Pollos Hermanos – ₹2,000
- **3rd Place:** Bug Squashers – ₹1,000

Hack the Halls successfully created an engaging platform that strengthened debugging skills, collaborative coding, and creative thinking among participants. The event reinforced the IEEE student community's commitment to innovation, teamwork, and technical excellence.



Project of the Month – March 2025 (PoTM)

Duration:

10th March 2025 – 4th April 2025

Final Submission Deadline:

5th April 2025 (11:59 PM)

Mode:

Hybrid (Project Development with Online Mentorship & Submissions)

Project of the Month – March 2025 was a month-long technical initiative conducted by the IEEE Computer Society, BMSIT&M Student Branch. The program encouraged student teams to conceptualize and develop innovative technical projects across domains such as Artificial Intelligence, Machine Learning, Augmented and Virtual Reality, Internet of Things, and Software Development.

Each participating team was assigned a unique Team Code to streamline communication and tracking throughout the program.

Guidelines and Structure:

- Teams were required to submit a Letter of Intent (LoI) outlining their project idea.
- Participants were provided with curated learning resources, weekly check-ins, and continuous technical support.
- All projects were maintained in a GitHub repository, which included:
 - Project description
 - Technology stack
 - Development workflow
 - Usage instructions
 - Documentation and a dedicated section describing PoTM participation
- Teams were allowed to modify their project scope by resubmitting the LoI if required.

Based on student requirements and feedback, faculty mentors were assigned to provide domain-specific guidance throughout the program.

Assigned Mentors:

- Mr. Ravi Kumar – Artificial Intelligence & Machine Learning
- Dr. Shobha – Data Science & Generative AI
- Mrs. Bharti R. – IoT, Networks & AI
- Ms. Srivani P. – AR/VR & AIML

Additionally, Team P1MR05 received special approval to utilize the VR headset and supporting system for project development.

Evaluation Criteria:

Projects were evaluated based on:

- Completeness and functionality
- Technical complexity
- Innovation and problem relevance
- Quality of documentation and repository structure

Winners:

- MedVault (Team Code: P1MR04)
- AI Interviewer (Team Code: P1MR01)
- Escape Room (Team Code: P1MR05)

The winners were officially announced through the IEEE Computer Society BMSIT&M social media platforms.

Project of the Month – March 2025 successfully fostered a culture of innovation, collaboration, and continuous learning among students. With strong faculty mentorship and enthusiastic participation, the initiative resulted in impactful technical projects and meaningful recognition for top-performing teams, reinforcing IEEE Computer Society's commitment to experiential learning and technical excellence.

Startup Sprint – A Startup Ideation and Pitching Event

Date:

7th April 2025 (Monday)

Time:

10:00 AM onwards

Venue:

APJ Abdul Kalam Lab, Lab Block,
BMS Institute of Technology & Management, Bengaluru

Participants:

Student teams consisting of 4 members from Engineering and MBA programs

Prize Pool:

₹5,000

Sprint was an intensive, fast-paced startup event organized by the IEEE Computer Society, BMSIT&M Student Branch. The event was designed to immerse participants in a simulated startup ecosystem, where teams worked through the complete entrepreneurial lifecycle—from problem identification and ideation to developing a minimum viable product (MVP) and delivering a compelling business pitch.

The event provided constant mentorship and concluded with a high-stakes pitching session, allowing students to experience real-world technology entrepreneurship in a dynamic and collaborative environment.

Participants registered in teams of four, with each team functioning as a startup. Every member assumed a predefined role to simulate an industry-like setup:

- **CEO / Founder:** Oversaw vision and strategic alignment
- **CTO:** Led technical design and prototype development
- **CFO:** Managed budgeting, revenue projections, and financial planning
- **CMO:** Handled branding, marketing strategies, and customer engagement

Teams brainstormed innovative solutions to real-world problems and worked on developing a structured startup idea. Emphasis was placed on:

- Innovation and feasibility
- Technology-driven solutions
- Market relevance and scalability

Participants also worked on outlining their MVP and defining their value proposition. The event culminated in a pitching session where teams presented their startup ideas to a panel of judges. Presentations focused on:

- Problem statement and solution clarity
- Technical approach and innovation
- Business viability and future scope

Teams were evaluated based on:

- Innovation and originality
- Practical feasibility of the solution
- Role clarity and team collaboration
- Effectiveness of the pitch presentation

Startup Sprint successfully introduced participants to entrepreneurial thinking by blending technology, business, and creativity into a single immersive experience. The event strengthened students' problem-solving, leadership, and presentation skills while reinforcing IEEE Computer Society's mission of fostering innovation and industry readiness among students.





IEEE Summer of Code 2025 – Open Source Community Program

Duration:

9th May 2025 – 28th June 2025

Mode:

Hybrid

Platforms Used:

Discord, GitHub

Participants:

3000+ registered participants from 15+ countries

Community Size:

2000+ active members on Discord

PrizePool: ₹75,000**Social Media Links:**

Website: <https://www.ieeesoc.xyz/>

LinkedIn: <https://www.linkedin.com/company/ieeesoc/>

Instagram: <https://www.instagram.com/ieeesoc/>

IEEE Summer of Code 2025 was a multi-week, virtual open-source program organized by the IEEE Computer Society Student Branch, BMSIT&M. The initiative aimed to provide students with hands-on exposure to open-source contribution workflows, collaborative development, and mentorship-led learning.

The program fostered a global technical community where participants collaborated on real-world projects, engaged in workshops, and participated in community-driven activities.

- **Registrations Open:** 27th April 2025
- **Meet & Code Session:** 9th May 2025
- **Registrations Close:** 15th May 2025
- **Coding Phase:** May–June 2025

- **Final Submissions:** 29th June 2025
- **Results & Leaderboard Announcement:** 5th July 2025

As part of IEEE Summer of Code 2025, multiple technical workshops were conducted in collaboration with industry and track sponsors.

Blockchain Developer Workshop Series (Powered by BlockseBlock):

- Introduction to Blockchain & Web3
- ICP Blockchain Basics
- Advanced ICP and Project Planning
- Live Project Deployment Training
- Final Workshop and Wrap-Up

Participants earned points for attendance and engagement, contributing toward leaderboard rankings and prize eligibility.

- **Dify Plugin Challenge:**
Participants built and contributed AI plugins using Dify, an open-source LLMOps platform, gaining exposure to AI tooling and plugin development.
- **Community Activities:**
 - Meme competitions
 - Tech trivia sessions
 - Code-based Pictionary games

These activities ensured sustained engagement and fostered a collaborative community environment beyond coding.

- Contributions were evaluated based on consistency, quality of pull requests, and community engagement.

- A leaderboard was maintained throughout the program.
- Top contributors received:
 - Cash prizes
 - Certificates
 - Swag boxes
 - Access to premium learning resources
 - Recognition on official platforms

Outcome and Impact:

- 1.8 million+ views across platforms
- 1000+ colleges represented
- Strong inter-collegiate and international participation
- Increased awareness and adoption of open-source practices among students

Conclusion:

IEEE Summer of Code 2025 emerged as a highly impactful open-source initiative that successfully bridged the gap between academic learning and real-world development practices. The program strengthened students' technical expertise, collaboration skills, and consistency while reinforcing IEEE Computer Society's role as a leader in large-scale technical community building.





STEMpire – AI & Digital Literacy Outreach Program

Date:

14th October 2024

Time:

10:00 AM – 3:30 PM

Venue:

BMS Institute of Technology & Management,
Yelahanka, Bengaluru

Participants:

120 students from Classes 8 and 9

Volunteers:

20 student volunteers from IEEE Computer Society

STEMpire was a one-day AI and digital literacy outreach program organized by the IEEE Computer Society Student Branch Chapter of BMSIT&M. The initiative aimed to introduce foundational concepts of computing, programming, and artificial intelligence to school students through engaging and practical sessions.

Students from **New Age World School (ICSE)** and **Sai Shankara Vidyashala (People's Trust, Sri Ramanahalli)** participated in the program. The event focused on simplifying complex technical concepts and presenting them in an interactive and student-friendly manner.

Session 1 – New Age World School (ICSE):

The morning session introduced students to Artificial Intelligence and programming fundamentals. It included:

- Ice-breaking activities to encourage interaction
- Introduction to the history and evolution of AI
- Basics of Artificial Intelligence and its real-world applications
- Introduction to Python programming
- Conceptual comparison between Python and Java

- Demonstration of Python libraries such as Matplotlib for data visualization
- Introduction to OpenCV and a live demonstration showcasing image and object detection

This session offered a balanced mix of theory and hands-on demonstrations, helping students understand how AI and programming are applied in real life.

Session 2 – Sai Shankara Vidyashala (People’s Trust):

The afternoon session focused on digital literacy and introductory computer science concepts. It comprised:

- Basics of digital tools and Microsoft Word, including a hands-on document creation exercise
- Introduction to Artificial Intelligence and Microsoft PowerPoint, with students creating AI-assisted presentations
- Introduction to web development concepts using HTML, CSS, and JavaScript, where students generated simple web pages using AI prompting

These sessions encouraged creativity while building essential digital skills among students.

Facilities and Support Provided:

- Lunch, snacks, and refreshments for students and volunteers
- Participation certificates for all students
- Transportation assistance for participating schools
- Access to well-equipped computer laboratories for hands-on learning

STEMpire successfully achieved its objective of introducing young students to the fundamentals of AI, programming, and digital tools. The program created a positive learning experience, sparked interest in technology, and reinforced IEEE Computer Society’s commitment to community outreach, education, and social responsibility.



