



RAAC

SVCCE

Sri Venkateswara
College of
Engineering



MAKE-A-THON 5.0

NATIONAL LEVEL TECHNICAL HACKATHON

MARCH 22ND & 23RD, 2024

**SRI VENKATESWARA COLLEGE OF ENGINEERING
(AUTONOMOUS AND AFFILIATED TO ANNA UNIVERSITY)
PENNALUR, SRIPERUMBUDUR(TK), TAMILNADU - 602 117, INDIA**

SRI VENKATESWARA COLLEGE OF ENGINEERING
(Autonomous - Affiliated to Anna University, Chennai)

**DEPARTMENT OF ELECTRONICS AND COMMUNICATION
ENGINEERING**

Vision:

To excel in offering value-based quality education in the field of Electronics and Communication Engineering, keeping in pace with the latest developments in technology through exemplary research, raising the intellectual competence to match global standards, and making significant contributions to society.

Mission:

- To provide the best pedagogical atmosphere of the highest quality through modern infrastructure, the latest knowledge, and cutting-edge skills.
- To fulfill the research interests of faculty and students by promoting and sustaining in-house research facilities to obtain reputed publications and patents.
- To educate our students, the ethical and moral values, integrity, leadership, and other quality aspects to cater to the growing need for values in society.

Objectives:

- To provide the best pedagogical atmosphere of the highest quality through modern infrastructure, the latest knowledge, and cutting-edge skills.
- To fulfill the research interests of faculty and students by promoting and sustaining in-house research facilities so as to obtain reputed publications and patents.
- To educate our students, the ethical and moral values, integrity, leadership, and other quality aspects to cater to the growing need for values in society.

Programme Educational Objectives (PEOs):

- PEO1: Create value for organizations as employees at various levels, by improving the systems and processes using appropriate methods and tools learned from the program.

- **PEO2:** Run an organization successfully with good social responsibility as an entrepreneur, using the knowledge and skills acquired from the program.
- **PEO3:** Contribute to the future by fostering research in the chosen area as an erudite scholar, based on the motivation derived from the program.

Outcomes:

- Participants gained a better understanding of real-world applications of their technical knowledge and received feedback on their projects from industry professionals.
- Participants gained exposure to potential career opportunities, internships, and collaborations through interactions with mentors, recruiters, and academic institutions.
- The event served as a launchpad for future endeavors, empowering participants to pursue their engineering dreams with newfound confidence and expertise.

Program Outcomes (POs):

- **PO 2: 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.
- **PO 3: 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.
- **PO 5: Modern Tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- **PO 9: Individual and Team Work:** Function effectively as an individual and as a member or leader in diverse teams, and in multidisciplinary settings.
- **PO 10: Communication:** Communicate effectively on complex engineering activities with the engineering community and with 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.

MESSAGE FROM HOD



It is a pleasure to head the Department of Electronics and Communication Engineering at Sri Venkateswara College of Engineering. For the past 37 years, the department has been offering excellent value-based quality education in the field of Electronics and Communication Engineering, keeping pace with the latest developments in technology through exemplary research. It has raised its intellectual competence to match global standards and has made significant contributions to society.

The department works to address critical challenges faced by industry, society, and academia. The growth of expertise in the department is meritorious. In keeping with the department's vision, the holistic development of the students is focused on, which instills a habit of continued learning and a sense of responsibility in them to contribute towards the betterment of society.

Make-a-Thon 5.0, the inter-college technical hackathon, was conducted on 22nd March and 23rd March, 2024. There was an overwhelming response. I congratulate the faculties and the members of ECEA, IETE-SF, and RAIC for making this event happen. It was beneficial for the engineering student community. I'm sure that the association and the clubs will organize many more events in the future.

I congratulate the teaching and non-teaching staff, the editorial board, and students of the Department of Electronics and Communication Engineering for bringing in this edition of the magazine to highlight the success of Make-a-Thon 5.0. I wish you all the best.

Dr. G. A. Sathish Kumar
Professor/HoD-ECE

MESSAGE FROM FACULTY COORDINATORS



**DR.T.J.JEYAPRABHA,
ASSOCIATE PROFESSOR, ECE**

I am extremely happy in releasing Make a thon 5.0 magazine for this year 2023-24. The team has worked very hard towards the success of this 5th edition. The experiences gained in all the four earlier editions have greatly helped towards the grand success of this event. It gives me immense pleasure to work along with my students team who have worked enormously for getting internships to our students. They have struggled hard towards the success of this event. This 24 hour hardware cum software hackathon unites students from various disciplines to bring out solutions to real time problems. The problem statements were chosen from various ministry and industry.

We thank all our Alumni Judges, Professors Dr.N.Venkateswaran, SSN & Dr.L.Vanitha, SAEC and Mr.Sandeep, Software Engineer - II, Boat, Bengaluru for sharing valuable advice and their insights to the students community in developing their models in business perspective. We thank our beloved management for organising this big flagship event, without their complete support this event would not have been possible. I, once again thank my entire team for the successful performance with so many hurdles and challenges.

MESSAGE FROM FACULTY COORDINATORS



**MR.S.ELANGO VAN,
ASSISTANT PROFESSOR,ECE**

I'm exhilarated in releasing the Departmental Magazine for the academic year 2023-2024. The role of education in today's era is not only to pursue academic excellence but also to require the overall development of a student. The department organizes technical and innovative events around the year, helping the students become industry-ready. The magazine is a glimpse of the national-level hackathon conducted by our department, Make-a-Thon 5.0. I thank the principal, the HoD, the faculties, and the students for their extended support for every event. The culmination of experiences from past editions has been instrumental in the resounding success of this event. Collaborating with my dedicated student team, who tirelessly pursued internship opportunities for their peers, has been immensely rewarding. Their unwavering dedication to the event's success, despite numerous challenges, reflects their admirable commitment. This 24-hour hardware cum software hackathon serves as a melting pot for students across disciplines, fostering collaborative solutions to real-time problems sourced from various ministries and industries.

MAKE-A-THON 5.0

SRI VENKATESWARA COLLEGE OF ENGINEERING
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
in association with
ELECTRONICS AND COMMUNICATION ENGINEERS ASSOCIATION
along with
THE INSTITUTION OF ELECTRONICS AND TELECOMMUNICATION ENGINEERS -
STUDENTS FORUM
&
ROBOTICS AND ARTIFICIAL INTELLIGENCE CLUB
presents

MAKE-A-THON

Innovate · Elevate · Collaborate

NATIONAL LEVEL TECHNICAL HACKATHON

ABSTRACT SUBMISSION EXTENDED TILL
8th MARCH, 2024

22nd & 23rd
MARCH, 2024

[REGISTER NOW](#)

<https://make-a-thon-5-0.vercel.app/>

SNEKHA R. Secretary (RAIC) - +91 99625 81585
DEEPIKA S. Treasurer (IEEA) - +91 9445949308

Make-a-thon 5.0 was a 24-hour national-level technical hackathon conducted by the Electronics and Communication Engineering Department of Sri Venkateswara College of Engineering. The event was organized by three prestigious clubs belonging to the ECE department, namely: the ECE Association, the IETE-student chapter SVCE, and the Robotics and Artificial Intelligence Club. This event served as a platform for students to think creatively and propose unconventional solutions through smart applications to tackle significant real-time issues in our nation. A total of 126 teams registered for the event, out of which 37 teams with 4–6 members each were shortlisted based on the abstract submitted.

The problem statements for Make-a-Thon 5.0 were aligned with the emerging technologies in the field of engineering.

The domains are:

1. Agriculture and Water Resource Management
2. Authentication and Security- Safety and Security
3. Automation
4. Business and Finance- Sea and Fishery
5. Cultural Heritage and Education
6. Disaster Preparedness – Food and Preservation
7. Health and Lifestyle
8. Healthcare
9. Public Transportation- Sanitation and Waste Management
10. Energy- Environmental Conservation

INAUGURAL CEREMONY



The inaugural ceremony kicked off with the arrival of the chief guest, Ms. Ramya, Associate General Manager at NEC. Joining her were Dr. G. A. Sathish Kumar, Head of the Department of ECE, the faculty coordinators of the association, Dr. T. J. Jeyaprabha, Associate Professor-ECE, and Mr. S. Elangovan, Assistant Professor-ECE.



ABOUT THE CHIEF GUEST



Dr. N. Venkateswaran is a renowned expert in Biomedical Engineering with a wealth of knowledge and experience that spans 27 years of teaching experience and 6 years of industry expertise. He has made significant contributions to Image and Signal Processing, Biomedical Signal Processing, Deep learning, Machine Learning, Wireless communication and Photonics System Design. In addition to his extensive prudence, he has also published more than 120 papers in national and international journals and conferences. Moreover, he holds the esteemed position of being the current chair of the IEEE Signal Processing Society, Madras section.

ABOUT THE CHIEF GUEST



Dr. L. Vanitha has had an impressive career journey, contributing significantly to academics and research at various esteemed institutions. Currently, she is serving as a beacon of knowledge at SA Engineering College, Department of Electronics and Communication Engineering. Her work on the project "Mental Stress Level Measurement Using HRV Analysis and Machine Learning" showcases her commitment to leveraging cutting-edge technologies to address social issues. Her work on "Material Management System" and "Inventory Control - Stores Accounting System" showcases her ability to merge theoretical knowledge with real-world implementation.

ABOUT THE JUDGES

There were three rounds of judging. The first two rounds of judging were done by faculties of SVCE.

Judges for the 1st Round of Make-a-Thon 5.0:

1. Dr. R. Gayathri, Professor/ECE
2. Dr. S. R. Malathi, Professor/ECE
3. Dr. N. Kumaratharan, Professor/ECE
4. Dr. P. Jothilakshmi, Professor and AHoD/ECE
5. Dr. D. Menaka, Associate Professor/ECE
6. Dr. M. Bindhu, Associate Professor/ECE
7. Mrs.C Gomatheeswari Preethika, Assistant Professor/ECE
8. Mr.S P Sivagnana Subramanian, Assistant Professor/ECE
9. Mrs.K Srividhya, Assistant Professor/ECE
10. Mrs.S Kalyani, Assistant Professor/ECE
11. Mrs. K.S. Subhashini, Assistant Professor/ECE
12. Mrs. S.M. Mehzabeen, Assistant Professor/ECE

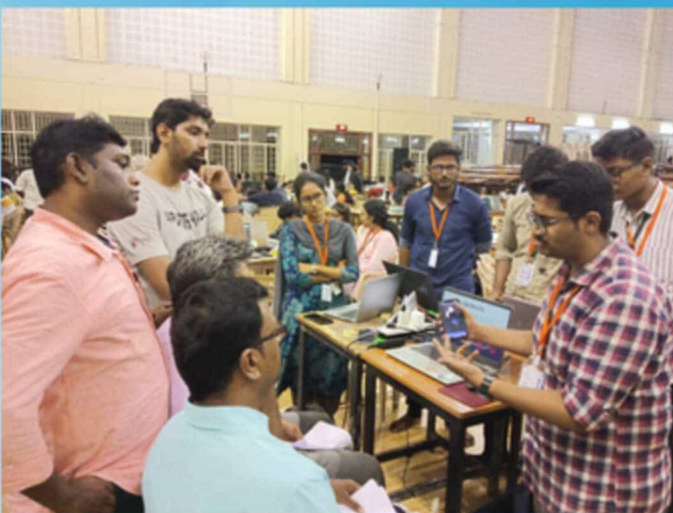
Judges for the 2nd Round of Make-a-Thon 5.0:

1. Dr. S. Kumaravel, Associate Professor/EEE
2. Dr. T. Annamalai, Associate Professor/EEE
3. Ms. A. Indumathi, Associate Professor/INT
4. Dr. T. J. Jeyaprabha, Associate Professor/ECE
5. Mr. P. Arul, Assistant Professor/ECE
6. Mr.S. Elangovan, Assistant Professor/ECE
7. Mr.M. K. Varadarajan, Assistant Professor/ECE
8. Mr.P. Muthukumaran, Assistant Professor/ECE
9. Mrs.B Sarala, Assistant Professor/ECE
10. Mrs.R. Kousalya, Assistant Professor/ECE
11. Mr.L.K. Balaji Vignesh, Assistant Professor/ECE
12. Mr. Sangeeth Kanna, Alumni of SVCE
13. Mr. Hari Prasad, Alumni of SVCE

ABOUT THE JUDGES

Judges for the 3rd Round of Make-a-Thon 5.0:

1. Mr. Prashanna Rangan, Senior Mechatronics engineer, Thryv Mobility
2. Mr. Siddique Afraaz N, Member technical staff, Zoho corporation
3. Mr. Sivasubramanian R, Associate QA SW Engineer, Extreme Networks
4. Mr. Sandeep , Software Engineer, Boat
5. Mr. Rakesh Elamaran, Security Engineer 2, Comcast
6. Ms. Israth Rehana, Senior Analyst, LatentView Analytics
7. Ms. Indhumathi Vijayarangan, Associate Software engineer, Eurofins IT Solutions
8. Ms. Reshma Suresh, Member Technical staff, Zoho corporation
9. Ms. Krishna Priya S, Software Analyst, Bounteous



WINNERS OF MAKE-A-THON 5.0

WINNER (HARDWARE):

Team name: Tech Orcas

Problem statement: Automatic Drug Dispenser



RUNNER UP (HARDWARE):

Team name: ElectraElite

Problem statement: Design a wearable glove with sensors and feedback mechanisms to assist users in learning sign language. The glove should provide real-time guidance on hand gestures and finger movements to aid in language acquisition



WINNERS OF MAKE-A-THON 5.0

SPECIAL MENTION (HARDWARE):

Team name: Spears

Problem statement: Create gloves with haptic feedback technology to guide users through physical spaces without the need for visual or auditory cues. The gloves should provide vibrations or pressure sensations to indicate directions and obstacles.



WINNER (SOFTWARE):

Team name: Gloriyavin Code-uh

Problem statement: Create an electronic voting system that integrates secure communication protocols with blockchain technology.



WINNERS OF MAKE-A-THON 5.0

RUNNER UP (SOFTWARE):

Team name: Yukthi

Problem statement:



SPECIAL MENTION (SOFTWARE):

Team name: Cletocite 3.0

Problem statement: Cultural Heritage Preservation



VALEDICTORY

The valedictory ceremony of Make-a-Thon 5.0 commenced on 23rd March 2024, at 2:30 PM. The chief guests were welcomed by Ms. Subasree S. S., Executive Member, IETE. The results of Make-a-Thon 5.0 were announced. The winners were provided with cash prizes, internships and certificates. The winners were awarded a cash prize of Rs.10000/- for first place, Rs. 6,000 for second place, and Rs.2000/- special mention, respectively, for both hardware and software teams.

Internship opportunities were provided to Gloriyavin code-uh under the software domain and Code Crafters under the hardware domain. Mementos were provided to the chief guests and the alumni for their presence at the event. Mr. Tamil Nilavan S., Joint Secretary, IETE, delivered the vote of thanks. The event ended successfully with the National Anthem.



ORGANISING COMMITTEE

Chief Patron : Dr.M.Sivanandham, Secretary, SVEHT

Patron : Dr.S.Ganesh Vaidyanathan, Principal, SVCE

Convenor : Dr.G.A.Sathish Kumar, Professor & HOD

Faculty Co-ordinators :

Dr.T.J.Jeyaprabha, ECEA,IETE-SF and RAIC Coordinator

Mr.S.Elangovan, ECEA, IETE-SF and RAIC Coordinator

ECEA

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Ms.Kanishkamathi S (II Year ECE B)

Ms.Varsha P (II Year ECE C)

IETE SF SVCE

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Vice Chairman

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Event Coordinator : Mr. Shashidar G(IV Year ECE C)

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Mr. Aadhithya Narayanan B(IIIYear ECE)

Mr. Parvesh R (III Year ECE B)

Mr. Prabhu Dharshan R (III Year ECE B)

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Mr. Umesh Anandh S (III Year ECE C)

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Mr. Manoj Kumar K (II Year ECE B)

Mr. Tamil Nilavan S (II Year ECE C)

RAIC

President : Mr. Ganeshan H (IV Year ECE A)

Vice President : Ms. Snehalatha M (IV Year ECE C)

Secretary : Ms. Snekaa R (III Year ECE C)

Joint Secretary :

Mr. Adarsh S (II Year ECE A)

Mr. Ramanathan M (II Year ECE B)

Ms. Vasantha Vidhya P V (II Year ECE C)

Lead Mentor : Mr. Rajit H (IV Year ECE C)

Mentors :

Ms. Kavitha S (III Year ECE B)

Mr. Kiransekhar (III Year ECE B)

Mr. Nandhanan R (III Year ECE B)

Mr. Parvesh R (III Year ECE A)

Mr. Ram Solaiappan A (III Year ECE B)

Mr. Saambavi P U (III Year ECE B)

