UPAGRAHA'22

National-level Intercollegiate Technical Symposium

NOVEMBER 1st & 2nd, 2022

SRI VENKATESWARA COLLEGE OF ENGINEERING

(Autonomous and affiliated to Anna University)

Pennalur, Sriperumbudur(TK), Tamil Nadu - 602 117, India.

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, to raise the intellectual competence to match global standards and to make significant contributions to the society.

Mission

- To provide the best pedagogical atmosphere of highest quality through modern infrastructure, latest knowledge and cutting-edge skills.
- To fulfil the research interests of faculty and students by promoting and sustaining inhouse research facilities so as to obtain the 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 the society.

Programme Educational Objectives (PEOs)

- PEO1: Create value to organizations as an employee at various levels, by improving the systems and processes using appropriate methods and tools learnt from the programme.

- PEO2: Run an organization successfully with good social responsibility as an entrepreneur, making use of the knowledge and skills acquired from the programme.

- PEO3: Contribute to the future by fostering research in the chosen area as an erudite scholar, based on the motivation derived from the programme.

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 in 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 the 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 upon that instills a habit of continued learning and a sense of responsibility in them to contribute towards the betterment of society.

       Upagraha'22, the national-level intercollegiate symposium of our department was organized by the Electronics and Communication Engineers Association, IETE-SF and RAIC on 1st and 2nd of November 2022. A total of 380 students from 30+ colleges participated in the symposium. Ten different events were conducted which helped in the overall technical development of the students.

       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 Upagraha'22. Wish you all the best.

Dr.S.Muthukumar
Professor/HoD-ECE
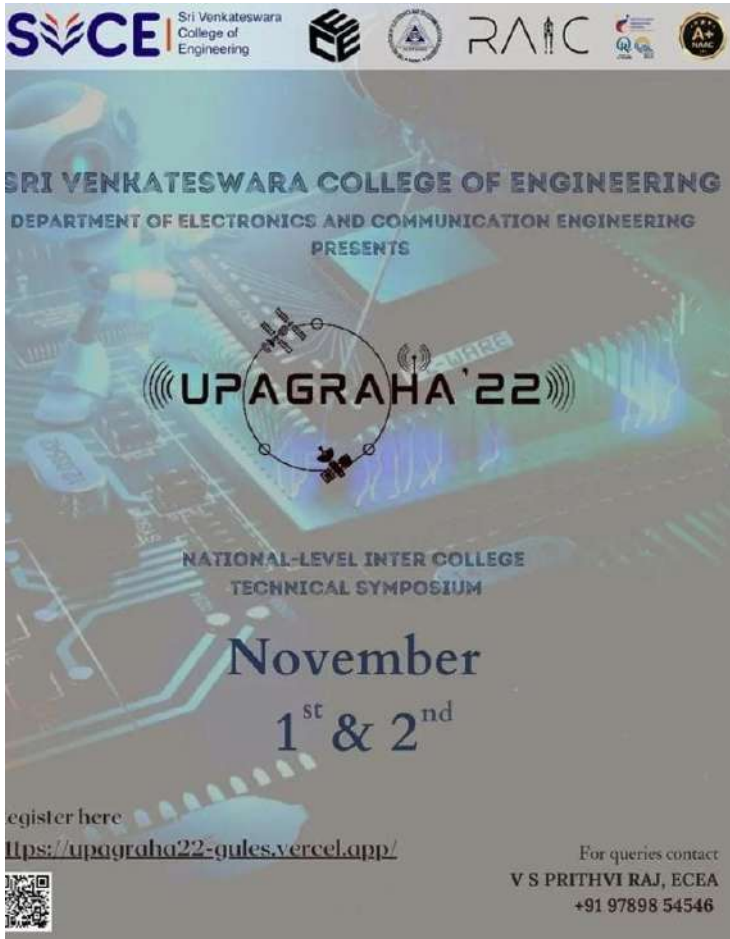
MESSAGE FROM FACULTY COORDINATORS

It is indeed a proud moment for the department of Electronics and Communication Engineering as the departmental magazine is issued. The department works relentlessly for the betterment of the students. The magazine highlights the success of Upagraha, the national-level symposium conducted by our ECE department. The department and the clubs under the department has been actively involved in organizing various technical events to help the students develop their skills. I thank the HoD, the faculties and the students for their efforts in bringing out this magazine.

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

I'm exhilarated in releasing the Departmental Magazine for the academic year 2022-2023. Role of education in today's era is not only to pursue academic excellence but also requires overall development of a student. The department organizes technical and innovative events round the year helping the students become industry-ready. The magazine is a glimpse of the national-level symposium conducted by our department- Upagraha. I thank the principal, the HoD, the faculties and the students for their extended support for every event.

MR.S.ELANGOVAN,
ASSISTANT PROFESSOR,ECE

UPAGRAHA'22

Upagraha'22 was a successful national-level technical symposium 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: ECE Association, IETE-student chapter SVCE and Robotics and Artificial Intelligence Club. The symposium served as a platform for students to expose their technical expertise and develop their creativity and induce a sense of innovation. The event received an overwhelming response from students belonging to various colleges in Tamil Nadu.

INAUGURAL CEREMONY

The inaugural ceremony commenced with the arrival of the chief guest Dr.Arun Janarthanan, SoC Power, Qualcomm along with Dr.S.Muthukumar, Head of the Department, dept of ECE and faculty co-ordinators of the association Dr.T.J.Jeyaprabha, Associate Professor-ECE and Mr.S.EElangovan, Assistant Professor-ECE

Dr. Arun Janarthanan is one of the most revered alumna from our college. He completed his masters and PhD in computer architecture. He is currently an SoC Power & Silicon Architect at Qualcomm. He is passionate about connecting textbooks to cutting-edge technology through story telling. He is an amazing leader who has trained many teams in the semiconductor industry

Apart from his job in one of the top electronics companies in the world, he is also fervent about building backbone to the student community by building indigenous Gurukulams. He has fostered around 300 children community during Covid, which eventually reached 40000 kids across India.

DAY-1 EVENTS

MINI HACKATHON

Mini-Hackathon was a 6-hour hackathon conducted as a part of Upagraha'22. The aim of the event was to improve and test the technical and problem-solving skills of the students. The participants were allowed to choose their own problem statement for which they had to come up with solutions. They were judged based on the following criteria-ambition of the problem, innovation of the solution, quality of implementation, people impact and quality of presentation. There were a total of 54 participants in the event.

Mrs.L.Anju, Mrs.K.S.Subhashini, Dr.D.Menaka and Mr.G.Loganathan were the judges for the event. The student coordinators and mentors for the event were Mr.M.Kishore, Mr.H.Ganeshan, Ms.M.Snehalatha and Mr.Avinash.P

The participants were allowed to choose their own problem statement for which they had to come up with solutions. They were judged based on the following criteria-ambition of the problem, innovation of the solution, quality of implementation, people impact and quality of presentation. Judges evaluated the teams thrice in the course of 6 hours.
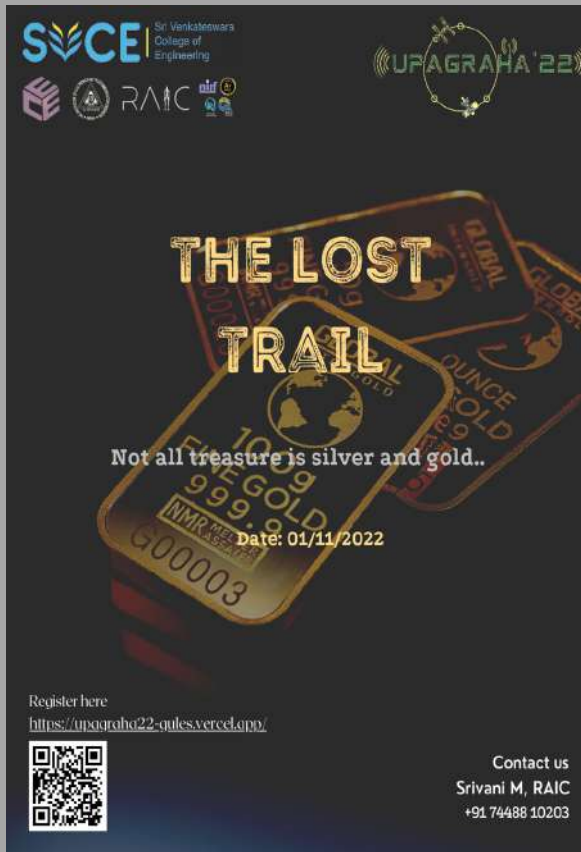

Winners of the event

CTRL+ALT+CODE

Ctrl Alt Code was a technical event conducted to check the understanding and application of C and C++ programming languages among the students. Around 27 students participated in the event. The event consisted of 2 rounds. The first round was MCQ based, where questions were pertaining to computers & coding. The top scorers were shortlisted for round 2, where they were given a few sets of codes that were incomplete and had outputs. Students had to complete the code in the question which gives the desired output as asked. The judgment was done based on the score and time taken to complete the task

Winners of the event

The event consists of 2 rounds. The first round was MCQ based, where questions were pertaining to computer & coding. Based on their cut-off score in round 1, the top scorers were shortlisted for round 2, where they were given a few set of codes which were incomplete and had outputs. Students had to complete the code in the question which gives the desired output. The judgement was done based on the score and time taken to complete the task.

Mrs.R.Kousalya & Mrs.B.Sarala, were the judges for the events. The student coordinators and mentors for the event were Mr.R Sowndhar, Mr.V S Prithvi Raj & Mr. M Kishore.

LOST TRAIL

The Lost Trail was organized as a part of Upagraha'22 by the department of Electronics and Communication Engineering in association with the Electronics and Communication Engineers Association (ECEA); Institution of Electronics and Telecommunication Engineers Student Forum of SVCE (ISF SVCE) and Robotics and Artificial Intelligence Club (RAIC). The event was aimed towards bringing out the technical skills of the participants and also to check their ability of completing a task in the timeframe provided. A total of 66 teams (132 students) participated in the event.

Winners of the event

The judges for the event were Mrs.S M Abinaya, Mrs.M Manimegalai and Mrs.B Elakkiya.

The coordinators for the event were Ms.Mrdulla V Naarayan, Ms.Srivani M and Mr.Shashidar G .

PITCH PERFECT

Pitch Perfect was a Techno-Managerial event aimed to promote technical acumen & market understanding amongst students. The event took place on 1st November, 2022 between 1:45 PM & 3PM, in the college premises. Around 85 students participated in the event. It consisted of 2 rounds – the first round was an MCQ round, where questions were pertaining to electronics, coding & aptitude. Based on their performance in round 1, the top scorers were chosen for round 2, where they were given a problem statement. They had to analyze the issue and come up with an innovative solution & pitch the project to the judging panel.

Dr.Athappan M, Dr.Venkatesh.S & Mrs C Gomatheeswari Preethika were the judges for the events. The student in charges for the event were Ms. Sahana B, Ms. Lakshana Sasikumar & Ms. Supraja R.

Winners of the event

The winner was judged based on how innovatively the idea was presented within the speculated time limit.
Cash prize was given to the winners.
A total prize pool of Rs. 2250 was allotted to the evet

PROJECT EXPO

Project Expo was organized as a part of Upagraha'22 by the department of Electronics and Communication Engineering in association with the Electronics and Communication Engineers Association (ECEA); Institution of Electronics and Telecommunication Engineers Student Forum of SVCE (ISF SVCE) and Robotics and Artificial Intelligence Club (RAIC). This event was aimed towards making the aspiring engineering students to present their innovations. A total of 19 teams (55 students) registered for the event, out of which 4 teams (13 students) were awarded.
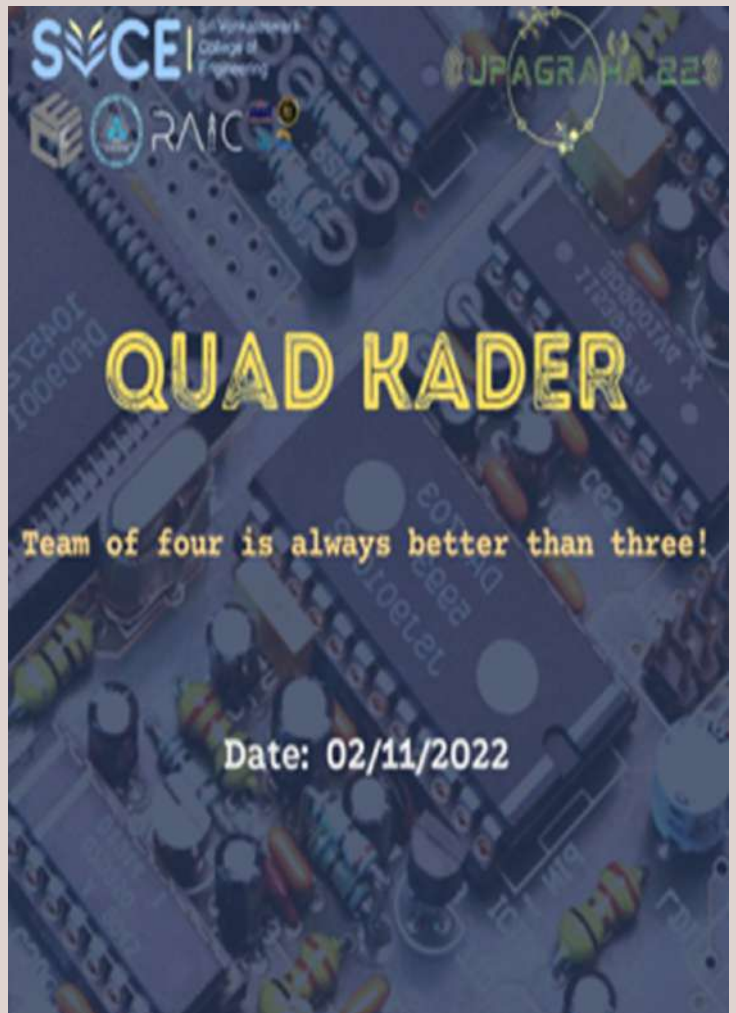
Winners of the event

The event coordinators were Srivani (III-year ECE-C), Raswanth.U (III-year ECE-C), Shashidar.G (III-year ECE-C), Sowndhar.R (III-year ECE-C), Rajeshvar M Swamy (III-year ECE-C).

The judges for the event were Mr.M.Athappan,Mr.P.Sivagnana Subramanian, Mr.R.Ramesh Kumar, Mr. M K.Varadharajan, Mr.V.Yokesh, Mrs.R Kousalya, Mr.N.Sathish, Dr.A.Prasanth, Mrs.K.S.Subhashini, Dr.S.Vijayanand

QUAD KADER

Quad Kader was organized by the department of Electronics and Communication Engineering in association with the Electronics and Communication Engineers Association (ECEA); Institution of Electronics and Telecommunication Engineers Student Forum of SVCE (ISF SVCE) and Robotics and Artificial Intelligence Club (RAIC). The event was conducted for a wide range of students from various Engineering colleges. Quad Kader was aimed towards making the students use their technical and non-technical skills in the 4 rounds conducted. A total of 45 teams (180 students) registered for the event, out of which 5 teams (20 students) were shortlisted based on their scores in the fourth and the final round.

Winners of the event

The event commenced on time in the classrooms at block 5. The rules and regulation of the event was explained briefly by the student coordinators to the participants. The coordinators of the event were Ms. M Snehalatha, Mr. Prithviraj, Ms. Vishnupriya. The judges for the event are Mrs.B.Hemalatha, Mrs.S.Mary Cynthia and Mrs.K.Srividhya.

SHARK TANK

Shark Tank was organized by the department of Electronics and Communication Engineering in association with the Electronics and Communication Engineers Association (ECEA); Institution of Electronics and Telecommunication Engineers Student Forum of SVCE (ISF SVCE) and Robotics and Artificial Intelligence Club (RAIC) on day 2 of UPAGRAHA'22. The event was conducted for both second and third years on November 2nd,2022. The main aim of this event was to explore ones management and rational thinking skills within the given stipulated time. It is a team event which consisted of 3 to 4 members in a team. A total of 42 teams registered for the event, out of which 12 teams attended the event on that day.

Winners of the event

The allocated coordinators for this event are Ms. Sahana.B (3rd year ECE-C), Ms.Supraja (3rd year ECE-C) and Ms.Mrdulla (3rd year ECE-B).The judges for this event were Mrs.Kalyani and Mr.Muthukumaran.

PAPER PRESENTATION

Winners of the event

Paper Presentation was organized by the department of Electronics and Communication Engineering in association with the Electronics and Communication Engineers Association (ECEA); Institution of Electronics and Telecommunication Engineers Student Forum of SVCE (ISF SVCE) and Robotics and Artificial Intelligence Club (RAIC) as an event in Upagraha'22, ECE Department Symposium.

Paper Presentation was aimed at scouting for the best projects that the students have come up with on their own. A total of 42 teams (81 students) registered for the event, out of which 18 teams (34 students) were shortlisted based on their project's abstract that was submitted during registration process. The papers were from various domains like IoT, Embedded Systems, ML&DL, VLSI and Communication.

The event commenced with Dr.G.A.Satish Kumar, Assistant Head of the Department (ECE Dept.), addressing the students about the importance of participating in events apart from academics. Then the rules of the event were explained to all the participating teams by the event co-ordinators. Paper Presentation consisted of one straight forward round. The shortlisted teams were equally divided among 4 panel of judges, to evaluate which paper was the best.
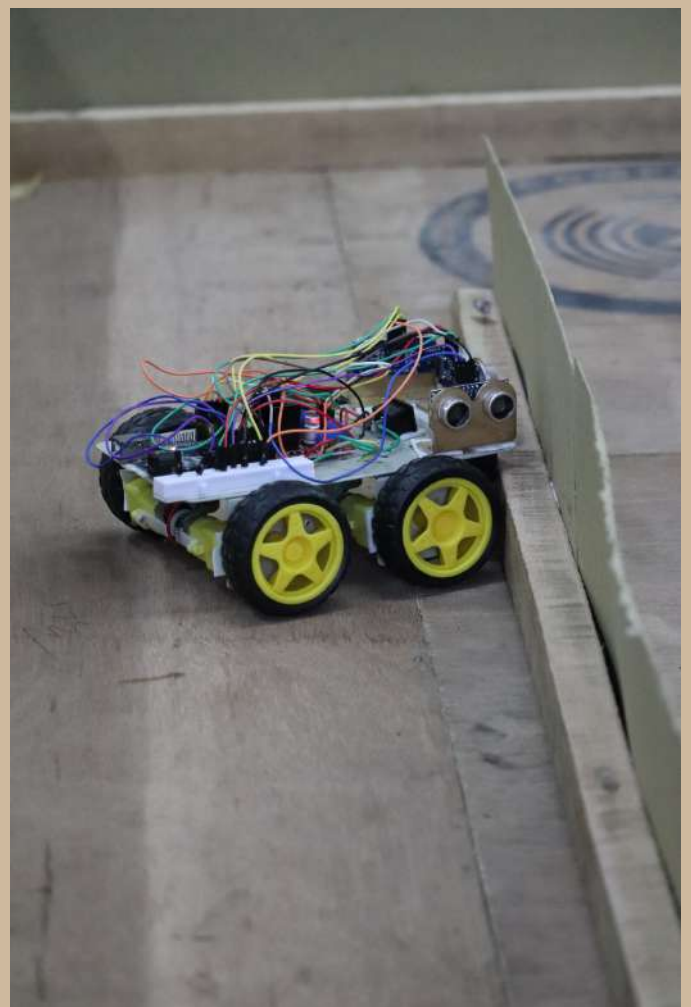
The allocated coordinators for this event are Mr. Avinash P (3rd year ECE-A),and Rajeshvar M Swamy (III-year ECE-C).The judges for this event were Dr.P.Joithilakshmi , Dr.R.Priyadharashini, Dr.R.Gayathri and Dr.G.A.Sathish Kumar.

MAZE BOT

Maze bot was organized by the department of Electronics and Communication Engineering in association with the Electronics and Communication Engineers Association (ECEA); Institution of Electronics and Telecommunication Engineers Student Forum of SVCE (ISF SVCE) and Robotics and Artificial Intelligence Club (RAIC). This event is one of the 9 events conducted in UPAGRAHA'22. It is a team event with each team consisting of 2 members. The event was made open to all students irrespective of their department, year of study, college. The event aimed to test students' knowledge on building robots by putting their hand made robots into a maze. The event had participants from various colleges and a total of 11 teams participated in the event. Two winners were given cash rewards.

Winners of the event

VALEDICTORY CEREMONY

The valedictory ceremony of UPAGRAHA'22 was organized by the department of Electronics and Communication Engineering in association with the Electronics and Communication Engineers Association (ECEA) along with the Institution of Electronics and Telecommunication Engineers Student Forum of SVCE(ISFSVCE) and Robotics and Artificial Intelligence Club (RAIC). The event took place on 2/11/2022 (Wednesday) from 2.30 PM to 3:30 PM. Certificates and cash prizes were distributed to winners of all the events.