

**DEPARTMENT OF COMPUTER SCIENCE AND
ENGINEERING**



2022-2023 (EVEN SEMESTER)

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ENGINEERING**



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With the immense gratitude and admiration for the Department of Computer Science's outstanding contributions over the past year. As a college advisor, I have had the privilege of witnessing firsthand the department's unwavering dedication to fostering academic excellence and professional growth among our students.

Throughout the year, the Department of Computer Science has organized numerous technical events, each meticulously designed to provide students with practical insights and hands-on experience in their field of study. From coding competitions to "Hackathons" and workshops, these events have not only enriched our students' academic journey but have also nurtured their passion for computer science and technology.

Moreover, I am deeply impressed by the department's relentless efforts towards placements. Through career fairs, networking events, and industry partnerships, the department has played a pivotal role in connecting students with promising career opportunities in the tech industry. Your commitment to ensuring the employability of our students is truly commendable and reflects the department's unwavering dedication to their success.

As a college advisor, I am keenly aware of the impact that the Department of Computer Science has had on our students' lives. Your dedication, passion, and tireless efforts have not gone unnoticed, and I am immensely grateful for all that you do. Your commitment to academic excellence and student success is an inspiration to us all.

In closing, I would like to extend my heartfelt appreciation to the entire Department of Computer Science for their outstanding contributions and dedication to our students' academic and professional growth. Your hard work and commitment have made a significant difference in the lives of our students, and for that, we are truly grateful.

Mr.K.Razak
Adisor



With profound appreciation and admiration for the Department of Computer Science's outstanding contributions to our academic community. As a college advisor, I have had the privilege of witnessing the department's unwavering dedication to nurturing student growth and success.

Throughout the academic year, the Department of Computer Science has orchestrated a myriad of technical events, each carefully crafted to provide students with invaluable hands-on experience and practical insights into the dynamic field of computer science. From coding competitions to "Hackathons" and workshops, these events have not only enriched our students' academic journey but have also fueled their passion for innovation and technology.

Furthermore, I am deeply impressed by the department's steadfast commitment towards placements. Through career fairs, networking events, and industry collaborations, the department has gone above and beyond to connect students with promising career opportunities in the ever-evolving tech industry. Your dedication to ensuring the employability and professional success of our students is truly commendable and serves as a beacon of inspiration for us all.

As a college advisor, I am acutely aware of the profound impact that the Department of Computer Science has on our students' lives. Your tireless efforts, unwavering dedication, and boundless enthusiasm have not only shaped the academic landscape of our institution but have also transformed the lives of countless students.

In closing, I wish to extend my heartfelt appreciation to the entire Department of Computer Science for their exemplary contributions and unwavering commitment to our students' academic and professional development. Your dedication and passion are truly unparalleled, and I am immensely grateful for the invaluable role you play in shaping the future leaders of tomorrow.

Mr.M.Vaasu
Adisor



I am delighted to take this opportunity to express my sincere appreciation to the Department of Computer Science for their outstanding contributions and tireless efforts in enriching our academic environment. As we reflect on the past academic year, it is evident that the Department of Computer Science has consistently demonstrated excellence in various facets of education, research, and professional development.

One of the highlights of the department's initiatives is the Kani Tamil Peravai, a platform that celebrates the richness of our cultural heritage while fostering linguistic proficiency among our students. The efforts put forth by the department in organizing this event have not only promoted cultural awareness but also provided a unique learning experience for our students.

Moreover, the department's dedication to enhancing the employability of our students is truly commendable. Through initiatives such as Mock Interviews and Technical Discussions, tailored specifically for our IV Year Value Added Course, students have been equipped with the necessary skills and confidence to excel in their professional endeavors. Covering a wide range of topics including C, C++, Java, Python, SQL, Data Structures, and more, these events have been instrumental in bridging the gap between academia and industry.

Additionally, the department's commitment to fostering a culture of research and innovation is evident through the Research Talks organized for our students. By providing a platform for scholarly discussions and knowledge sharing, the department has inspired our students to explore new horizons and pursue excellence in their chosen fields.

I am particularly impressed by the collaborative spirit and dedication exhibited by the faculty and staff of the Department of Computer Science. Their unwavering commitment to student success, coupled with their passion for teaching and research, has been a driving force behind the department's achievements.

As we look ahead to the future, I have no doubt that the Department of Computer Science will continue to uphold its tradition of excellence and innovation. On behalf of the entire college community, I extend my heartfelt gratitude to the department for their invaluable contributions and dedication to academic excellence.

Dr.N.Balaji
Principal



As we reflect on the past year, I am filled with immense pride and gratitude for the remarkable accomplishments of the Department of Computer Science. It has been a year marked by innovation, collaboration, and unwavering dedication to excellence, and I am honored to celebrate the myriad achievements of our departmental community.

Throughout the year, the Department of Computer Science has been at the forefront of fostering academic excellence and professional growth among our students. Our commitment to providing a holistic learning experience is evident in the multitude of events and initiatives organized by the department.

One of the cornerstones of our department's initiatives is the relentless focus on industry relevance and employability. We have conducted numerous Mock Interviews and Technical Discussions tailored specifically for our IV Year students, focusing on essential topics such as SQL, Data Structures, and more. These initiatives have not only equipped our students with the practical skills and knowledge required to excel in their careers but have also provided them with invaluable insights into the industry landscape.

Furthermore, the department's dedication to fostering a culture of research and innovation has been truly inspiring. Our Research Talks have provided a platform for students to showcase their scholarly work, exchange ideas, and collaborate on cutting-edge research projects. This emphasis on research not only enriches the academic experience of our students but also contributes to the advancement of knowledge in the field of computer science.

As we look ahead to the future, I am confident that the Department of Computer Science will continue to uphold its tradition of excellence and innovation. Together, we will strive to push the boundaries of knowledge, inspire creativity, and empower our students to make a meaningful impact on society.

On behalf of the entire college community, I extend my heartfelt appreciation to the Department of Computer Science for their outstanding contributions and dedication to academic excellence. Your hard work and dedication have truly made a difference in the lives of our students, and for that, we are immensely grateful.

Dr.S.Soundararajan

Vice-Principal



To express my heartfelt appreciation to the Department of Computer Science for their outstanding contributions and unwavering dedication to our academic community. As the Head of the Department, and a proud member of this esteemed group, I am privileged to witness the remarkable efforts put forth by each member of our department.

Over the past year, our department has organized numerous technical events that have not only enriched the academic experience of our students but have also provided them with invaluable practical knowledge and skills. From coding competitions to hackathons, workshops, and seminars, these events have served as platforms for our students to explore their passions, expand their horizons, and develop essential competencies in the ever-evolving field of computer science.

In addition to these technical events, I am deeply appreciative of the department's dedication towards placements. Through career fairs, networking events, and industry collaborations, we have worked tirelessly to connect our students with promising career opportunities in the tech industry.

I am particularly proud of the recent Technical Discussions organized for our IV Year Value Added Course, covering essential subjects such as C, C++, Java, Python, SQL, Data Structures, and more. These discussions, along with insightful Research Talks, exemplify our department's commitment to providing a comprehensive and well-rounded education to our students. Your dedication to their academic and professional development is inspiring and serves as a testament to the excellence that defines our department.

In closing, I wish to extend my sincere gratitude to the entire Department of Computer Science for their outstanding contributions and commitment to excellence. Together, we will continue to strive for academic excellence, innovation, and student success.

Dr.V.P Gladis Pushparthi
HOD-CSE

INSTITUTE VISION

To be a leader in imparting quality technical education, research & enterprising skills in pursuit of professional excellence.

INSTITUTE MISSION

- **To promote quality education & technical skills to meet the industry requirements.**
- **To incorporate team work, leadership skills & lifelong learning.**
- **To facilitate career development & higher education assistance.**
- **To encourage innovative ideas for research & development and entrepreneurship for societal needs.**
- **To inculcate ethical responsibility & human values.**

VISION OF THE DEPARTMENT

To Create Successful Engineers with Technical Competency and Innovative Ideas in The Field of Computer Science and Engineering.

MISSION OF THE DEPARTMENT

- To achieve academic excellence through effective teaching-learning process to meet the demands of the industry.**
- **To equip students to face the challenges in the field of Computer Science and Engineering and prepare them as responsible engineers with human values.**
 - **To enrich students with required skills for employability, entrepreneurship and pursuing higher studies.**
 - **To encourage the students to implement innovative ideas for research and development.**

Program Outcomes (POs)

- 1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.**
 - 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.**
 - 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.**
 - 4. 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.**
 - 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.**
 - 6. 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.**
- Program Outcomes (POs)**

Program Outcomes (POs)

- 7. 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.**
- 8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.**
- 9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.**
- 10. Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being 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.**
- 11. 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.**
- 12. Life-long learning: Recognize the need for, and have the preparation and ability to engage independent and life-long learning in the broadest context of technological change**

PROGRAM EDUCATIONAL OBJECTIVES (PEO's)

GRADUATES OF COMPUTER SCIENCE AND ENGINEERING PROGRAM WILL

- 1. Apply their technical competence in computer science to solve real world problems, with technical and people leadership.**
- 2. Conduct cutting edge research and develop solutions on problems of social relevance.**
- 3. Work in a business environment, exhibiting team skills, work ethics, adaptability and lifelong learning.**

PROGRAMME SPECIFIC OUTCOMES (PSO's)

GRADUATES OF BACHELOR OF COMPUTER SCIENCE AND ENGINEERING WILL HAVE THE ABILITY AND CAPABILITY TO

PSO1: Apply the acquired knowledge of Mathematics and Computer Science Engineering fundamentals to analyse, design and develop software products or projects.

PSO2: Identify and apply appropriate latest software tools to provide solutions for complex engineering problems.



EDITORIAL BOARD

News Letter

2023

Chief Editor

**Gayathri Devi L (IV Year)
Likitha (IV Year)**

Student Editorial Board

**Meesala Pravallika (IV Year)
Ashok Kumar (IV Year)
Mohammed Fiaz (IV Year)
Lokamithra S (IV Year)
Pooja B (IV Year)
Tushal J (IV Year)**

Staff Coordinator

**Mr. A.Anbumani
Assistant Professor CSE**



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Department activities

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Student's Participations



Department activities



ESPABLO'2K23

Place : Third Floor Seminar Hall

Date : 11-03-2023

DESCRIPTION :

The Department of CSE at the Velammal Institute of Technology is in charge of organizing the cultural event Espablo'2k23. The event for this year took place on March 11, 2023, and students in their second, third, and fourth years attended. This event served as a venue for students to demonstrate their skills in a variety of cultural pursuits.

A vibrant inaugural ceremony set the stage for the event's subsequent cultural performances. Mr.

Vaitheeswaran, a final year student, played VIP-Call a Band as he welcomed Principal Sir. Tamil

Thaai Vaazthu was used to launch the programme.

Dr. Gladispushparathi, HOD-CSE, gave the welcome speech. Our principal, Dr. N. Balaji, delivered the speech from the presidency.

AI in Industry Perspective

Place : ONLINE

Date : 22.02.2023

DESCRIPTION :

On Behalf of Computer Science and Engineering & Artificial Intelligence and Data Science Department and Velammal I Tech Webinar on AI in Industry Perspective is conducted for the II Year students on 22-02-2023. This event was organized by Mr.R.Raja, Assistant Professor/CSE and Mr.G. Yuvaraj, Assistant Professor/CSE. The inaugural session was conducted with the welcome address by Mr.R.Raja, Assistant Professor/CSE followed by the information shared about the College and Department by Dr.S.Selvakanmani, Associate Professor and Head of the Department of Computer Science and Engineering & Artificial Intelligence and Data Science.

Page 8 is presenting

OF AI

THE ULTRASONIC SENSOR BASED COLLISION AVOIDANCE ROBOT

Top Drive:

if $D > D_0$
Move Forward

else
Turn Left

S_0 is Constant

Bottom Lp:

if $D > D_0$
Move Forward

else
Turn Left

Time Gap between Wall Detection
 $T_{01}, T_{02}, T_{03}, T_{04}, T_{05}$

$T_{01} = (T_{01} + T_{02} + T_{03} + T_{04} + T_{05}) / 5$
 $S_0 = S_0 + T_{01}$



602-0022-82W

Page 9 is presenting

MACHINE LEARNING



Artificial intelligence (AI)
An intelligence that enables machines to perform tasks that would normally require human intelligence.

Machine learning (ML)
A subset of AI that enables machines to learn from data without being explicitly programmed.

Artificial neural networks (ANN)
A type of ML that is inspired by the structure and function of the human brain.

Deep learning (DL)
A subset of ML that uses multiple layers of artificial neural networks to learn from data.

Artificial Intelligence

Machine Learning

Artificial neural networks

Deep learning

602-0022-82W

Participants list:

- Kabir Ahmed
- MOO - CSE Vellam...
- S
- SANTOSH C S
- R
- Rajesh
- Y
- YOKESHRAJAN K...
- M
- ARUN KUMAR E
- Y

WhatsApp Messages

Messages sent will be given to people in the chat and are deleted when the chat ends.

- RIGHTWINGPRESSOR 10:40 AM
Hello, I am a student of a college and I am interested in AI.
- SANTOSH C S 10:41 AM
Hi, I am a student of a college and I am interested in AI.
- SANTOSH C S 10:42 AM
Hi, I am a student of a college and I am interested in AI.
- SANTOSH C S 10:43 AM
Hi, I am a student of a college and I am interested in AI.
- SANTOSH C S 10:44 AM
Hi, I am a student of a college and I am interested in AI.
- SANTOSH C S 10:45 AM
Hi, I am a student of a college and I am interested in AI.
- SANTOSH C S 10:46 AM
Hi, I am a student of a college and I am interested in AI.
- SANTOSH C S 10:47 AM
Hi, I am a student of a college and I am interested in AI.
- SANTOSH C S 10:48 AM
Hi, I am a student of a college and I am interested in AI.
- SANTOSH C S 10:49 AM
Hi, I am a student of a college and I am interested in AI.
- SANTOSH C S 10:50 AM
Hi, I am a student of a college and I am interested in AI.
- SANTOSH C S 10:51 AM
Hi, I am a student of a college and I am interested in AI.
- SANTOSH C S 10:52 AM
Hi, I am a student of a college and I am interested in AI.
- SANTOSH C S 10:53 AM
Hi, I am a student of a college and I am interested in AI.
- SANTOSH C S 10:54 AM
Hi, I am a student of a college and I am interested in AI.
- SANTOSH C S 10:55 AM
Hi, I am a student of a college and I am interested in AI.
- SANTOSH C S 10:56 AM
Hi, I am a student of a college and I am interested in AI.
- SANTOSH C S 10:57 AM
Hi, I am a student of a college and I am interested in AI.
- SANTOSH C S 10:58 AM
Hi, I am a student of a college and I am interested in AI.
- SANTOSH C S 10:59 AM
Hi, I am a student of a college and I am interested in AI.
- SANTOSH C S 11:00 AM
Hi, I am a student of a college and I am interested in AI.

Participants list:

- Kabir Ahmed
- KABIR AHMED
- S
- D
- V S
- 92 others
- Y

Zoom Meeting

MACHINE LEARNING



- Artificial Intelligence (AI)**
The broadest field, encompassing all systems and machines that can perform tasks that typically require human intelligence.
- Machine Learning (ML)**
A subset of AI that focuses on developing algorithms that can learn from and make predictions based on data.
- Artificial Neural Networks (ANNs)**
A type of ML algorithm that is inspired by the structure and function of the human brain.
- Deep Learning (DL)**
A subset of ML that uses multiple layers of ANNs to model complex patterns in data.

Zoom Meeting

Participants:

- Richard Anderson
- SUBHENDRANATHAN V
- S
- D
- SARIN KUNAL M
- OPINUS A D
- Y
- S
- YOUNG JAMES M
- SANTOS C B
- H D
- IT Jones

Zoom Meeting

Zoom Meeting

Press **Esc** to exit full screen

MACHINE LEARNING

Practical Application Examples

- Virtual Personal Assistants
- Video Surveillance
- Social Media Services
- Email Spam and Malware Filtering
- Online Customer Support
- Search Engine Result Refining
- Product Recommendations

Zoom Meeting

Participants:

- Richard Anderson
- SUBHENDRANATHAN V
- S
- D
- SARIN KUNAL M
- OPINUS A D
- Y
- S
- YOUNG JAMES M
- SANTOS C B
- H D
- IT Jones

Zoom Meeting

Student Corner



S.N o	Event Date	Event Name	Name Of The Organizer	Name Of The Student	Participati on/ Prizes
1.	20.03.2023	Mechsprint - Projectexpo	Srm Institute Of Science And Technology	Dravid M	Participant
2.	20.03.2023	Devnest - Hackathon	Srm Institute Of Science And Technology	Gnaneswaran B	Won Prize
3.	10.02.2023	AI Horizons - Projectexpo	Vellore Institute Of Technology	Harikeerthi S	Participant
4.	10.02.2023	Softcraft - Hackathon	Vellore Institute Of Technology	Haritha D	Participant
5.	10.02.2023	Biofusion -Ideathon	Vellore Institute Of Technology	Hemalatha S	Participant
6.	20.03.2023	Cloudscape - Workshop	Srm Institute Of Technology	Madanambeti Vinay	Participant
7.	20.03.2023	Mechsprint - Projectexpo	Srm Institute Of Technology	Mafin Sharo J	Participant
8.	10.02.2023	Cloudscape - Workshop	Saveetha University	Manchu Pallavi	Participant
9.	18.02.2023	Symposium	VEC	Mahesh D	Won Prize
10.	09.02.2023	Symposium	SIMATS	Yashwanth V	Won Prize
11.	09.02.2023	Symposium	SIMATS	Rishuganth S	Won Prize
12.	03.02.2023	Symposium	SRM	Santhosh C S	Participant
13.	03.02.2023	Symposium	SRM	Aravind Raj N	Participant
14.	03.02.2023	Symposium	SRM	Find Franklin	Participant
15.	03.02.2023	Symposium	SRM	Kiranjith V	Participant
16.	18.02.2023	Symposium	PANIMALAR	Alfiyaz	Won Prize

17.	18.02.2023	Symposium	SRM	MANOJ KUMAR J	Participant
18.	18.02.2023	Symposium	VIT	Vignesh B	Participant
19.	18.02.2023	Symposium	VIT	Praveen	Participant
20.	18.02.2023	Symposium	VIT	Mohan Kumar V S	Participant
21.	18.02.2023	Symposium	PANIMALAR	SRI DHARSHINI VS	Participant
22.	18.02.2023	Symposium	MEENAKSHI	Janani V V	Participant
23.	18.02.2023	Symposium	VIT	Mafin Sharo	Participant
24.	18.02.2023	Symposium	SRM	Devanand	Participant
25.	18.02.2023	Symposium	VIT	Parameswaran	Participant
26.	18.02.2023	Symposium	AGNI	Bachu Maneesh	Participant
27.	18.02.2023	Symposium	VIT	Ram Kumar	Participant
28.	18.02.2023	Symposium	VIT	Sriram S	Participant
29.	18.02.2023	Symposium	VIT	Keerthika	Participant
30.	18.02.2023	Symposium	MEENAKSHI	Keerthana M	Participant
31.	24.02.2023	Symposium	SIMATS	Dudala Akhila	Participant
32.	24.02.2023	Symposium	SIMATS	Priya A	Participant
33.	24.02.2023	Symposium	VEC	Hindhuja M P	Won Prize
34.	24.02.2023	Symposium	SIMATS	Vimal S	Participant
35.	24.02.2023	Symposium	SIMATS	Kuberan J	Participant
36.	09.03.2023	Symposium	SIMATS	Palani Vel V M	Participant

37.	09.03.2023	Symposium	SIMATS	Sharan Raj G	Participant
38.	09.03.2023	Symposium	AGNI	Yogesh P	Won Prize
39.	09.03.2023	Symposium	PANIMALAR	Tamizh D	Participant
40.	09.03.2023	Symposium	AGNI	Aarthi S	Participant
41.	09.03.2023	Symposium	AGNI	Danish Mark J M	Participant
42.	23.03.2023	Symposium	AGNI	Midhun S	Participant
43.	23.03.2023	Symposium	VIT	Naveen Kumar K	Won Prize
44.	23.03.2023	Symposium	AGNI	Nithya S	Participant
45.	23.03.2023	Symposium	VIT	Poovarasi M	Won Prize
46.	23.03.2023	Symposium	AGNI	Revathy P	Participant
47.	23.03.2023	Symposium	VIT	Sanjai S	Won Prize
48.	29.03.2023	Symposium	AGNI	Siva Pugal J	Participant
49.	29.03.2023	Symposium	PANIMALAR	Vishva S	Participant
50.	08.04.2023	Symposium	SIMATS	Yogesh G	Participant
51.	08.04.2023	Symposium	SIMATS	Sakthivel M	Participant
52.	08.04.2023	Symposium	SRM	Udaya Kumar N	Participant
53.	08.04.2023	Symposium	SRM	Premika S	Participant
54.	08.04.2023	Symposium	SRM	Inbaa D I	Participant
55.	14.04.2023	Symposium	PANIMALAR	Abishek L	Participant
56.	14.04.2023	Symposium	PANIMALAR	Gokul T	Participant

57.	14.04.2023	Symposium	PANIMALAR	Kiruthika G	Participant
58.	08.04.2023	Symposium	M EENAKSHI	LAVANYA V	Participant
59.	08.04.2023	Symposium	PANIMALAR	Aswin Raj S	Participant
60.	08.04.2023	Symposium	SIMATS	Ajay P	Participant
61.	08.04.2023	Symposium	SRM	Dharshini R	Participant
62.	08.04.2023	Symposium	AGNI	Santhosh M	Participant
63.	08.04.2023	Symposium	SIMATS	ASHWIN MS	Participant
64.	14.04.2023	Symposium	VIT	MONISH R	Participant
65.	08.04.2023	Symposium	SRM	KISHOR PM	Participant
66.	14.04.2023	Symposium	PANIMALAR	Shrimukhi S	Participant
67.	08.04.2023	Symposium	PANIMALAR	Nivetha S	Participant
68.	02.03.2023	Symposium	SRM	MADHUSREE R	Participant
69.	02.03.2023	Symposium	SRM	Sivaranjani T	Participant