NEWS LETTER

.S.R. OLLE E O EN INEERIN

(Autonomous)

Department of Computer Science and Engineering

TECH EXPLORER

ACADEMIC YEAR-2023-2024

EVEN SEMESTER

NEWS LETTER 2024,VOLUME 24, ISSUE NO. 2
JAN-JUN 2024

K. S. R. College of Engineering – Tiruchengode

Autonomous Institution

NEWS LETTER

Vision of Institution

We envision to achieve status as an excellent educational institution in the global knowledge hub, making self-learners, experts, ethical and responsible engineers, technologies, scientists, managers, administrators, and entrepreneurs who will significantly contribute to research and environment-friendly sustainable growth of the nation and the world.

Mission of Institution

To inculcate in the students' self-learning abilities that enable them to become competitive and considerate engineers, technologists, scientists, managers, entrepreneurs, and administrators by diligently imparting the best of education, nurturing environmental and social needs.

To foster and maintain a mutually beneficial partnership with global industries and Institutions through knowledge sharing, collaborative research, and innovation.

Vision of Department

To empower students to be ethical cyber security professionals, entrepreneurs and pioneers in safeguarding the digital world.

Mission of Department

Provide comprehensive and Industry-relevant critical thinking skills to tackle emerging cyber security challenges with highest standard of cyber security education.

Enhance industry-academia collaboration, facilitate knowledge transfer with cyber security best practices through state-of-art laboratory.

Foster a culture of research and innovation in cyber security cutting-edgetechnologies, develop novel solutions and contribute to the advancement of cyber security knowledge.

DEPARTMENT VISION & MISSION:

Vision 01

DV: To create ever green professionals for software industry, academicians for knowledge cultivation and researchers for contemporary society modernization.

Mission 02

DM1: To produce proficient design, code and system engineers for software development

DM2: To keep updated contemporary technology and fore coming challenges for welfare of the society.

The Graduates of the programme will be able to:

PEO 1 : Rational Computing : Figure out, formulate, analyze typical problems and develop effective solutions by imparting the idea and principles of science, mathematics, engineering fundamentals and computing.

PEO 2 : Professional Excellence : career through life-long learning. Competent professionally and successful in their chosen

PEO 3 : Social and Ethical Technocrats : Excel individually or as member of a team in carrying out projects and exhibit social needs and follow professional ethics.

Programs Outcomes (POs):

Engineering graduates will be able to:

PO1: Engineering Knowledge : Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2: 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.

PO3: 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.

PO4: 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.

PO5: Modern Tool Usage : Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations

PO6: 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.

PO7: 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.

PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9: Individual and Team Work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10: 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.

PO11: 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.

PO12: Life-long Learning: engage in independent change.: Recognize the need for, and have the preparation and ability to and life-long learning in the broadest context of technological change.:

Progarm Specific Outcomes (PSOs):

PSO1: Technical competency: Develop and Implement computer solutions that accomplish goals to the industry, government or research by exploring new technologies.

PSO2: Professional awareness: Grow intellectually and professionally in the chosen field.

Chairman Message

Thiru R. Srinivasan BBM., MISTE.,
Chairman, KSR Educational Institutions

The Technical colleges under Aarthi Educational & Charitable Trust are the product of a vision of a dream of excellence in affordable education. The chasm to synchronize the traditional value system and the contemporary ideas of engineering and technology is increasing at an alarming pace. There is a need to build bridge between two realms to ensure progress of multitude of people in the society. The Trust has an everlasting commitment for developing professional with humane and pragmatic approach to bring change in the society.

We at K.S.R. College of Engineering stand for promoting academic excellence and rigorous discipline with sound practical exposure amongst the student community. Make yourself competent for the globalised world through tireless striving by staying focused like a rocklan angry ocean for hard work, as miles are to be covered before we all go to sleep.

With best wishes

Thiru R. Srinivasa

Chairman,

KSR Educational Institutions

Principal Message

Dr. P. SENTHILKUMAR,M.E.,Ph.D.,

Principal, KSRCE

Its with immense pride and joy that I present to you the latest edition of our CSE Department magazine a vibrant reflection of the creativity, talent, and achievements of our students and staff. Over the past one decade, KSRCE has served the young engineering aspirants of our nation by providing state-of-art facilities and well knowledgeable faculty members. The Institute has held high the lighted torch of teaching and learning and has not failed in its duty in the hour of need. The students imbibe qualities of an excellent teacher and researcher to set academic standards. The last couple of years marked several milestones in the history of KSRCE. Technology is constantly evolving, and staying up to date with the latest trends can help us stay competitive in the job market, give you access to new features and capabilities. I congratulate the editorial team, contributors, and all those who have worked tirelessly to bring this edition to life. Let this magazine serve not only as a record of our accomplishments but also as an inspiration for the journeys yet to come.

With best wishes

Dr.P.SENTHILKUMAR

Principal

HOD Message

Dr.V.Sharmila M.E., Ph.D

Professor & Head

Department of Computer Science And Engineering

The HOD of CSE take great honor in congratulating the students who have contributed for the current year's News Letter. I really hope that this would be as useful as the last editions. Acknowledging the fact that the News Letter is completely created and designed by the students I really hope this would kindle a spark in the minds of the students who are yet to contribute towards the progress of the News Letter Initiative in the upcoming years. All the best students!

With best wishes

Dr.V.Sharmila

Professor & Head CSE

EDITORIAL BOARD

Dr.V.Sharmila

Ms.R.Keerthana

Mr.S.Ajithkumar

STUDENTS

N.Ananthu

M.Aaarkesh

P.Lindonia

P.Jeevitha

Publication in Patent by Faculty :

Even (2023-2024)

1. The Method and Apparatus for Face Recognition Using Artificial Intelligence, patented (Application No. 202221053962) by Dr. E. Baby Anitha, Dr. George Chellin Chandran J, Dr. Arun Korath, Ms. K. Veena, Dr. Venkata N. Inukollu, Mrs. Radha Seelaboyina, and Dr. Nimmy John T, introduces an AI-powered system for highly accurate facial recognition in real-time environments.

2. The Robot for Carrying Goods Powered by Arduino for Industrial Applications, patented (Application No. 202341002697) by Arulkumar R., Manojee K.S., and Namasivayam M. along with their team, proposes an efficient goods transportation robot system for industries using Arduino.

3. The Application of Artificial Intelligence in Agriculture Weather Management, patented (Application No. 202341007252) by P. Palanisamy, Dr. M. Ramesh Kumar,M. Saravanan, Dr. P. Rupa Ezhil Arasi, and others, uses AI to manage and forecast weather conditions critical to farming decisions.

4. The Detection of Fake News Using Machine Learning Algorithms, patented (Application No. 202341012483) by Dr. A. Rajiv Kannan, Dr. N. Vasuki, Dr. C. Anand, Dr. V. Vennila, Mr. E. Kannan, Mr. V. Ramesh, Dr. R. Banupriya, and Ms.M. Jayanthi, applies machine learning to combat misinformation in digital media.

5. The IoT-Based Traffic Control and Monitoring System to Avoid Accidents and Smart Spacing for Ambulance Service, patented (Application No. 202241070705) by O.K. Gowrishankar, Dr. G. Singaravel, Dr. K. Balamurugan, and team, enhances traffic management and emergency response using IoT-based technology.

6. The IoT-Based Autonomous Firefighting Drone, patented (Application No. 398156-001) by M.K. Nivodhini, Dr. R. Banupriya, P. Vasuki, Dr. S. Vadivel, and S. Maheshwari,

uses IoT technology and advanced sensors to autonomously detect and extinguish fires.

Nptel 1.

1.V. Shanmugavalli completed the **The Joy of Computing using Python** course (July – October 2023, 12 weeks) and received an **Elite + Silver** certification.

2. J. Nirmlala Gandhi completed the **Affective Computing** course (January – April 2023 12 weeks) and earned an **Elite** certification. ,

3.K. Venkatesh Guru completed the **Affective Computing** course (January – April 2023 12 weeks) and earned an **Elite** certification. ,

4. V. Sharmila successfully completed the **Compiler Design** course (January – April 2023 12 weeks) with an **Elite** certification. ,

5. V. Vennila earned an **Elite** certification in the **Introduction to Artificial Intelligence** course (January – April 2023, 12 weeks).

6. M. Jayanthi received an **Elite** + Silver certification for completing the **Cloud Computing** course (January – April 2023, 12 weeks).

7. S. Ajithkumar completed the **Cloud Computing** course (January – April 2023, 12weeks) with a **Successfully Completed** grade

8. C. Anand earned an **Elite** grade for the **Compiler Design** course (January – April 2023,12 weeks).

9. Vasuki successfully completed the **Cloud Computing** course (January – April 2024, 12 weeks) and received an Elite certification.M.K. Nivodhini earned an **Elite** certification in the **Cloud Computing** course (January – April 2023, 12 weeks).

10. Keerthana R completed the **Cloud Computing** course (January – April 2023, 12 weeks) with a **Successfully Completed** grade.

11. E. Baby Anitha successfully completed the **Computer Networks and Internet Protocols** course (January – April 2023, 12 weeks).

12. R. Banupriya earned an Elite certification for the **Database Management Systems** course (Jan – Mar 2023, 8 weeks).

publication

7. In June 2023, K. Deepa Thilak, K. Kalaiselvi, Dr. Lalitha Devi, Mrs. B. Ananthi, and Dr. K. Kumaresan published **Introduction to IoTs and its Applications** through Deccan International Academic Publishers, providing insights into IoT fundamentals, architecture, and its diverse applications .

8. Another significant contribution titled **Improving Ecommerce Performance by Dynamically Predicting the Purchased Items Using FUP Incremental Algorithm** was

published in 2023 in the conference proceedings of **Smart Trends in Computing and Communications** by K. Kalaiselvi, K. Deepa Thilak, S. Saranya, T. Rajeshkumar, M. Malathi, M. Vijay Anand, and K. Kumaresan, focusing on enhanced e-commerce predictions using data mining techniques .

FDP

9. Nivodhini M K participated in the Data Science using machine learning program at Pravara Rural Engineering College, conducted from January 2 to January 6, 2023 (5 Days).

10. AZHAGESAN M participated in the Bio-Medical Sensor & Signal Processing program at Loyola Institute of Technology, conducted from January 9 to January 13, 2023 (5 Days).

11. AZHAGESAN M participated in the Intellectual Property Commercialisation workshop at Turnip innovation Festival 2023, conducted on January 21, 2023 (1 Day).

13. AZHAGESAN M participated in the Data Analytics & Machine Learning program at Ramco Institute of Technology, conducted from February 13 to February 17, 2023 (5 Days).

14. E.BABY ANITHA participated in the Data Analytics using Power BI program at G Narayanamma Institute of Technology and Science (for women), conducted from March 20 to March 24, 2023 (5 Days).

15. S.Ajithkumar participated in the Training Program on Cloud Fundamentals at ExcelR . Raising Excellence, conducted from March 13 to March 27, 2023 (15 Days).

16. R.Keerthana participated in the Transforming Digital Healthcare with adaptive artificial Intelligence seminar at Hindusthan Institute of Technology, conducted from March 15 to March 17, 2023 (3 Days).

17. M.Jayanthi participated in the Training Program on Cloud Fundamentals at ExcelR Raising Excellence, conducted from March 13 to March 27, 2023 (15 Days).

18. M.Jayanthi participated in the Data Analytics using Power BI program at G Narayanamma Institute of Technology and Science (for women), conducted from March 20 to March 24, 2023 (5 Days).

19. P.Vasuki participated in the Data Analytics using Power BI program at G Narayanamma Institute of Technology and Science (for women), conducted from March 20 to March 24, 2023 (5 Days).

20. S.Ajithkumar participated in the Data Analytics using Power BI program at G Narayanamma Institute of Technology and Science (for women), conducted from March 20 to March 24, 2023 (5 Days).

21. AZHAGESAN M participated in the Intellectual Property Commercialisation workshop at Turnip Innovation Festival 2023, conducted on April 26, 2023 (1 Day).

22. AZHAGESAN M participated in the Lifestyle for Environment Pledge workshop at Ministry of Electronics & Information Technology, Government of India, conducted on April

23. AZHAGESAN M participated in the Application of Machine Learning and Artificial Intelligence in Research and Innovations program at RCERT Jaipur, conducted from May 2 to May 6, 2023 (5 Days).

24. P.Vasuki participated in the The Art of Proposal Writing: Road Map seminar at K S R Institute for Engineering and Technology, conducted on May 15, 2023 (1 Day).

25. V.Shanmugavalli participated in the Application of Machine Learning and Artificial Intelligence in Research and Innovations program at RCERT Jaipur, conducted from May 2 to May 6, 2023 (5 Days).

26. V.Shanmugavalli participated in the Data Science and Chat GPT program at KL Deemed to be University ExcelR Raising Excellence, conducted from May 15 to May 19, 2023 (5Days).

27. AZHAGESAN M participated in the The Art of Proposal Writing: Road Map seminar at K S R Institute for Engineering and Technology, conducted on May 15, 2023 (1 Day).

28. Keerthana R participated in the Data Science and Chat GPT program at KL Deemed to be University Excel Raising Excellence, conducted from May 15 to May 19, 2023 (5 Days).

29.Dr. E.BABY ANITHA participated in the International workshop on Application of Machine Learning and Artificial Intelligence in Research and Innovations at Regional College of Education Research and Technology Jaipur, conducted from May 2 to May 6, 2023 (5 Days).

30. Keerthana R participated in the cloud computing program at NPTEL-AICTE, conducted from January to April 2023 (12 Weeks).

31. JAYANHI M participated in the cloud computing program at NPTEL-AICTE, conducted from January to April 2023 (12 Weeks).

32. NAMASIVAYAM M participated in the Data Science and Chat GPT program at KL Deemed to be University ExcelR Raising Excellence, conducted from May 15 to May 19, 2023 (5 Days).

33. ARULKUMAR R participated in the Data Science and Chat GPT program at KL Deemed to be University ExcelR Raising Excellence, conducted from May 15 to May 19, 2023 (5 Days).

34. ARULKUMAR R participated in the "The Art of Proposal Writing: Road Map" seminar at Research and Development Division, K S R Institute for Engineering and Technology, conducted on May 15, 2023 (1 Day).

35. Palanisamy P participated in the Application of Machine Learning and Artificial Intelligence in Research and Innovations program at RCERT Jaipur, conducted from May 2 to May 6, 2023 (5 Days).

36. ANAND C participated in the International workshop on Application of Machine Learning and Artificial Intelligence in Research and Innovations at Regional College of Education Research and Technology Jaipur, conducted from May 2 to May 6, 2023 (5 Days).

37. Banupriya R participated in the "5 Days Online International Faculty Development Program on Data Analytics using Power BI" at G Narayanamma Institute of Technology and Science, conducted from March 20 to March 24, 2023 (5 Days).

38. AJITHKUMAR S participated in the AICTE Recognized Faculty Development Programme on Energy Efficient and Decarbonisation Technologies at NITTTR, conducted from June 5 to June 9, 2023 (5 Days).

39. Nivodhini M K participated in the The Art of Proposal Writing: Road Map seminar at K S R Institute for Engineering and Technology, conducted on May 15, 2023 (1 Day).

40. V.Vennila participated in the Application of Machine Learning and Artificial Intelligence in Research and Innovations program at Regional College for Education Research & Technology, Jaipur, conducted from May 2 to May 6, 2023 (5 Days).

41. V.Vennila participated in the NPTEL-AICTE FDP - An Introduction to Artificial Intelligence program at IIT-Madras, conducted from January to April 2023 (12 Weeks).

42. SHARMILA.V participated in the Application of Machine Learning and Artificial Intelligence in Research and Innovations program at Regional College for Education

Research & Technology, Jaipur, conducted from May 2 to May 6, 2023 (5 Days).

43. MANOJEE K.S participated in the The Art of Proposal Writing: Road Map seminar at K S R Institute for Engineering and Technology, conducted on May 15, 2023 (1 Day)

44. MANOJEE K.S participated in the Pandas in Python webinar at Marudhar Kesari Jain College for Women, Vaniyambadi, conducted on April 5, 2023 (1 Day). .

45. MANOJEE K.S participated in the "Art of writing aresearch paper" webinar at MIC Groups, conducted on June 30, 2023 (1 Day).

46. ARULKUMAR R participated in the The Art of Proposal Writing: Road Map seminar at K S R Institute for Engineering and Technology, conducted on May 15, 2023 (1 Day).

47. ARULKUMAR R participated in the AICTE Recognized Faculty Development Programme on Energy Efficient and Decarbonisation Technologies at NITTTR, conducted from June 5 to June 9, 2023 (5 Days).

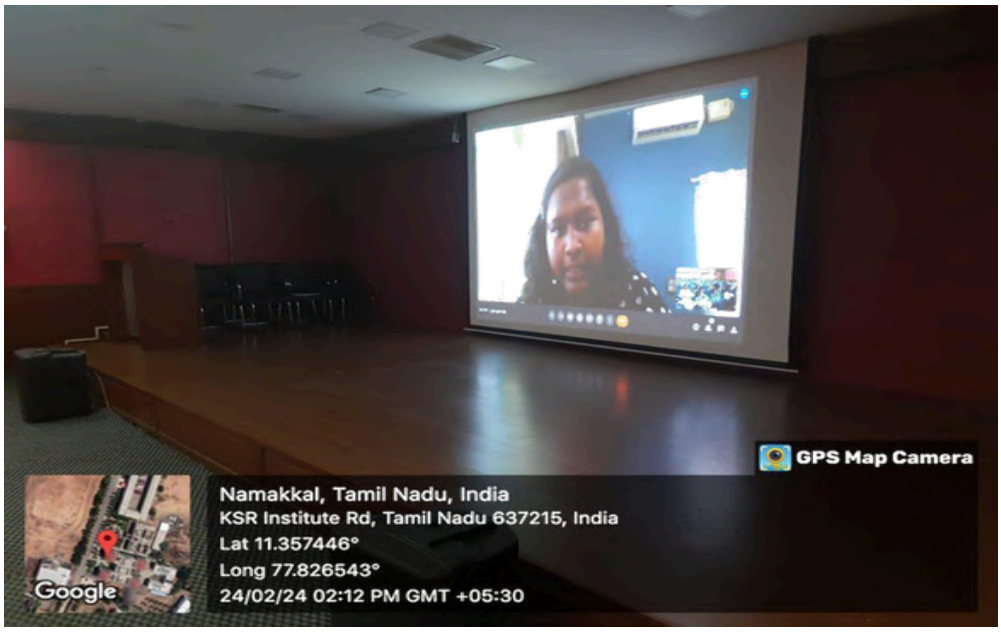
48. ARULKUMAR R participated in the Advancement of Artificial Intelligence in cyber security program at Ajay Kumar Garg Engineering College, conducted from June 19 to June 23, 2023 (5 Days).

49. ARULKUMAR R participated in the Data Analyst program at APSSDC and Collaboration With ExcelR, conducted from June 19 to June 23, 2023 (5 Days).

LIST OF EVENTS ORGANIZED BY THE DEPARTMENT

The Department of Computer Science and Engineering has organized a series of enriching events for the academic year 2023-2024 as part of their publication initiatives. Mr. Kalki P K, a 2D & 3D Generalist, was the resource person, and the seminar saw 190 students participating. On 9th February 2024, seminar titled "An Awareness on Career Development and Current Technology" was conducted, with Mr. M. Yuvaraj, Director & Chief Instructor of UCS SYSCOMS LLP, as the guest speaker.

This event attracted 130 students. On 24th February 2024, two significant seminars were organized: the first one, "A Motivation on Career Development", featured Vaanmathee Paranthaman, Senior Display and Programmatic Specialist at Assembly Global Pvt Ltd, Chennai, and had 190 students participating.



The second seminar on On ***24th February 2024*** titled ***"Exploring Current Industry Trends, Market Dynamics, and Future Scope"***, had ***Nandhini Kuppusamy***, Lead Software Engineer (Data Engineering) at

Virtusa Consulting Pvt Ltd., as the speaker, and was attended by ***190 students***.

Lastly, a **Webinar on "Internet of Things"** was held on **2nd March 2024**, where **Srihari Vairavel**, Full Stack Developer at Sanmina SCI Technology, shared his expertise, with **190 students** participating. These events aim to offer students valuable insights into industry trends, career development, and the latest technologies.

The Department of Computer Science and Engineering at KSRCE has been actively organizing various events for the academic year 2023-2024 to enhance the knowledge and skills of students. On March 9, 2024, a seminar on "Applications of Neural Networks" was conducted, where M. Induja, Senior Software Engineer (Full Stack Developer) at Softura Pvt Ltd, Chennai, shared valuable insights with 190 students. This seminar focused on the practical applications of neural networks in the industry.

On the same day, another seminar on "API and Service Test Automation" was held. The session was led by A. Danusri, Programmer Analyst at Cognizant Technology Solutions. A total of 190 students participated in this seminar, which aimed to provide an understanding of API testing and the role of automation in the testing process. A guest lecture on "NoSQL" was conducted on April 17, 2024, by Ms. S. Poorani, Assistant Professor (Sr.G) in the Department of Computer Technology at Kongu Engineering College, Erode. The lecture attracted 130 students and focused on the significance and applications of NoSQL databases in modern software development. Lastly, KSRCE organized the 2nd International Conference on "Challenges in Information, Communication and Computing Technology (ICCICCT- 2024)" from April 26 to 27, 2024. The event featured distinguished speakers such as Mr. Erode Mahesh, Anchor, Actor, Educator, and Motivational

Speaker, and Dr. Kailash Kumar from the College of Computing and Informatics, Saudi Electronic University, Riyadh, Kingdom of Saudi Arabia. The conference saw the participation of 195 students and faculty members and provided a platform to explore cutting-edge topics in information and communication technology.

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Industrial Visit (Faculty)

Mr. V. Ramesh , AssisstantProfessor in the Computer Science and Engineering department, participated in an industrial visit focused on Data Warehousing and Data Mining from December 21, 2023, to December 23, 2023, organized at Iguider Learning Private Limited.

Internship:

S No	***Student name***	***Organization name***
1	Harish R	Codingmart technologies
2	Sivasuriya V R	Lucid imaging

3	Dhanasri A	Acmegrade pvt ltd
4	Mohamed kalifa S	Acmegrade pvt ltd
5	Babu shankar pawar	Abs pvt ltd

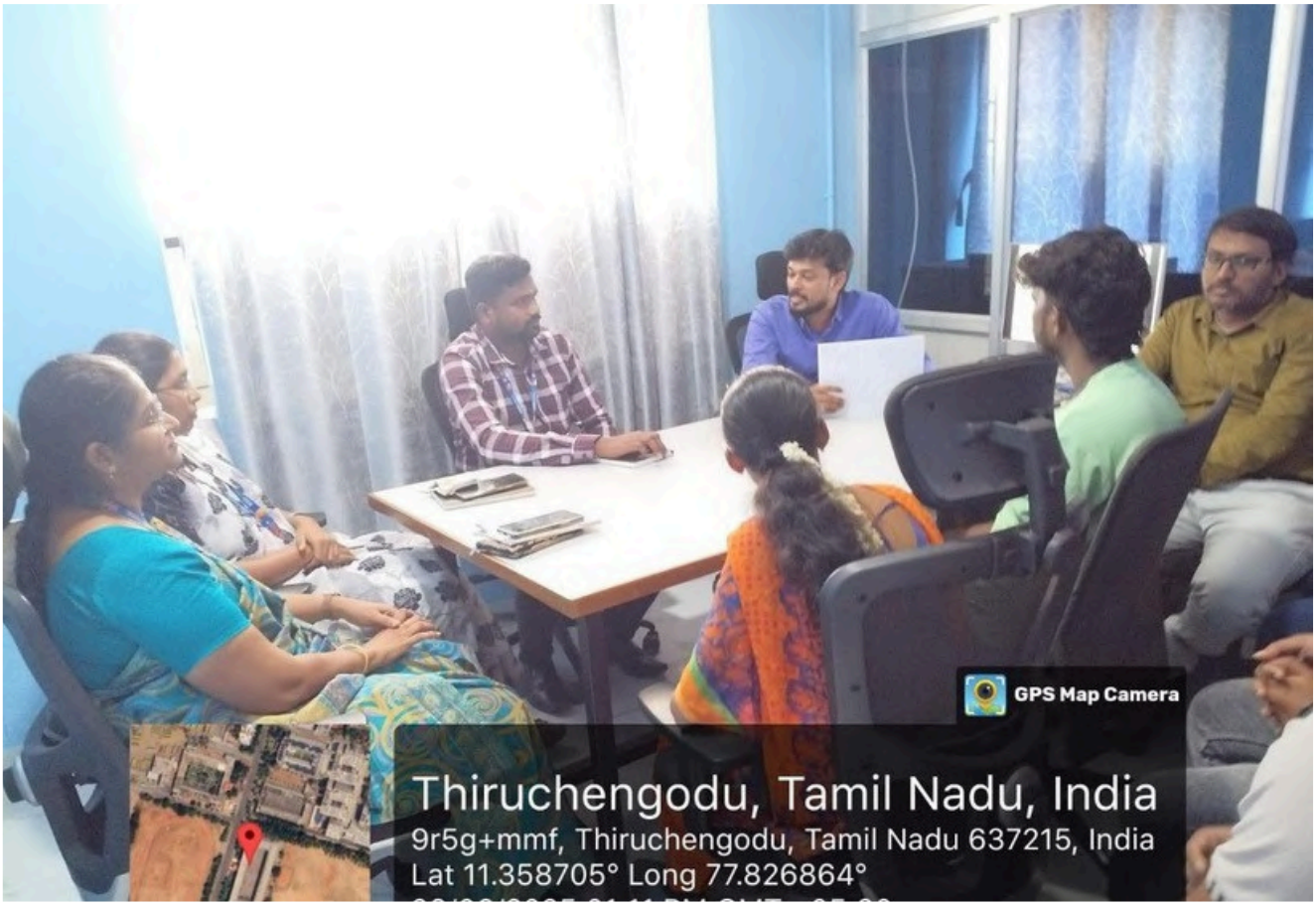
Placement:

S No	***Name of the Company***	***Student Count***
1	Abs privated limited	1
2	Accenture	1
3	Agnito systems	2
4	Allsectech	3
5	Arpina solutions private limited	11
6	Blackflux	3
7	Capgemini	1
8	Codingmart technologies	1
9	Compliance cow	1
10	Corizo	11
11	Desicrew	1
12	Happiest minds	3
13	Hexaware technologies	1

14	Hikeon technologies	3
15	Hyrrokkin branding services pvt ltd	1
16	Icu medical india	1
17	Ison experiences	1
18	KT Telematic	10
19	Lucid imaging	1
20	Mallow technologies	2
21	Maventic	4
22	Movate technologies pvt ltd	1
23	Oneyes infotech solutions	2
24	Paisabazaar	1
25	Pentagon space	12
26	Profuturetech solutions private limited	14
27	Propel technology solutions	1
28	Rits consulting & technology	2
29	Sciera solutions private limited	1
30	Tcslimited	5
31	Vinsinfo	10
32	Volante technologies	3

MOU:

1.	Arpina Solutions Private Limited, Bangalore	Department of CSE, K.S.R College of Engineering	18.07.2023	Five Years



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