

Faculty Profile



Dr. R. Satheeskumar , M.Tech., Ph.D
Professor / CSE

HIGHLIGHTS:

- Number of Journal Publications: 29
- H-Index: 4
- Project Funding Received: Nil
- Patents Published: 16
- Patents Granted: Nil

PROFESSIONAL LINKS:

- Scopus ID: 59473918100
- Scopus Link: <https://www.scopus.com/authid/detail.uri?authorId=59473918100>
- Google Scholar ID: <https://scholar.google.com/citations?user=1arwTEcAAAAJ&hl=en>
- Anna University Faculty ID: 2633871981
- AICTE Faculty ID: 1-437025799
- Anna University Supervisor ID: Nil
- LinkedIn: <https://www.linkedin.com/in/professorsathees/>

PROFESSIONAL BACKGROUND:

- Teaching Experience till date: 21 Years
- Industrial Experience: Nil

AREA OF SPECIALIZATION:

- Data Mining
- Machine Learning / Deep Learning
- Wireless Sensor Network
- Network Security

PATENTS PUBLISHED/GRANTED:

- UK Patent - Design number 6387414, " ORNAMENTAL FEATURES OF AN INVENTORY TRACKING DEVICE," Grant date: 22 October 2024, Publication date: 23 October 2024.
- Indian Patent application 202421055125, "AI-VISION BASED INVESTMENT ANALYTICAL FINANCIAL APPLICATION IN IOT AND SOCIAL DISTANCE MONITORING DEVICE," Aug 09, 2024.
- Indian Patent application 202211026249, "A SYSTEM & METHOD FOR INVENTORY CONTROL & MANAGEMENT SYSTEM BASED ON RFID, IOT & AI," May 05, 2022.
- Indian Patent application 202241038299, "IOT BASED SMART SWITCHES WITH CHILD LOCK AND VOICE CONTROL FACILITY", July 08th, 2022
- Published 12 Patents in Emerging Technologies, 2025-26.

COURSES CERTIFIED:

NPTEL:

1. Problem Solving Through Programming in C in NPTEL (IIT Kharagpur) in July-Oct 2024.
2. Data Base Management System in NPTEL (IIT Kharagpur) in Jan-March 2025.
3. Data Mining in NPTEL (IIT Kharagpur) in Jan-March 2026.

Infosys Springboard Course:

1. Data Structures and Algorithms using Java, on July 12, 2023
2. Programming using Java, on July 12, 2023
3. Introduction to Deep Learning, on August 1, 2024

Research Article Publication

1. **Satheeskumar, R.,** Oyyathevan, S., Thimmiraja, J. et al. FedAli-PHAR: personalized federated learning with optimal transport-based prototype alignment for robust human activity recognition in pervasive computing. CCF Trans. Pervasive Comp. Interact. (2026). <https://doi.org/10.1007/s42486-026-00246-y>. (**Springer, ESCI, Scopus**)
2. **Satheeskumar, R.,** Premalatha, V., Krishnan, M.N. *et al.* Integrative Strategies to Enhance Enzyme-Protein Interactions for Drug Discovery and Biocatalysis. *Appl Biochem Biotechnol* (2025). <https://doi.org/10.1007/s12010-025-05462-3>. (**Springer, SCIE, Scopus**)
3. **Satheeskumar, R.,** Devabalan, P., Satyanarayana, C.H.V. *et al.* Adaptive AI framework for pharmacokinetics using GATs, transformers, and AutoML. *Mol Divers* (2025). <https://doi.org/10.1007/s11030-025-11390-5>. (**Springer, SCIE, Scopus**)

4. **R. Satheeskumar**, Electrohydrodynamic instabilities of Walters-B fluids under dynamic electric fields in marine engineering systems, *Ocean Engineering*, Volume 342, Part 2, 2025, 122930, ISSN 0029-8018, <https://doi.org/10.1016/j.oceaneng.2025.122930>. (**Elsevier, SCIE, Scopus**)
5. **R. Satheeskumar**. Machine Learning-driven Identification of the Honeymoon Phase in Pediatric Type 1 Diabetes and Optimizing Insulin Management. *J Clin Res Pediatr Endocrinol*. 2025 Aug 22;17(3):278-287. doi: 10.4274/jcrpe.galenos.2025.2024-8-13. Epub 2025 Jan 24. (**SCIE, Scopus**)
6. **Satheeskumar, R.** (2025). Comparative Analysis of Object Detection and Recognition in Video Streams Using Faster R-CNN, Mask R-CNN, and EfficientDet. In: Sharma, H., Shrivastava, V., Tripathi, A.K., Wang, L. (eds) *Communication and Intelligent Systems. ICCIS 2024. Lecture Notes in Networks and Systems*, vol 1373. Springer, Singapore. https://doi.org/10.1007/978-981-96-5729-2_9 (**Springer, Scopus**)
7. **R. Satheeskumar et al.**, "Enhanced Hybrid Deep Learning Model for Cybersecurity Threat Detection Using CNN-Bi-LSTM and Feature Optimization," *2025 IEEE International Conference on Blockchain and Distributed Systems Security (ICBDS)*, Kolhapur, India, 2025, pp. 1-6, doi: 10.1109/ICBDS67396.2025.11379867. (**Scopus**)
8. **Satheeskumar, R.**, Premalatha, V., Talatoti, R.K. *et al.* Next-generation ant-inspired cryptography for secure and resilient decentralized IoT ecosystems. *Iran J Comput Sci* (2025). <https://doi.org/10.1007/s42044-025-00311-2>. (**Springer, Scopus**)
9. **R. Satheeskumar**, "Enhancing drug discovery with AI: Predictive modeling of pharmacokinetics using Graph Neural Networks and ensemble learning", *Intelligent Pharmacy*, Volume 3, Issue 2, 2025, Pages 127-140, ISSN 2949-866X, <https://doi.org/10.1016/j.ipha.2024.11.002>. (**Elsevier, Scopus**)
10. Suresh Munnangi, **Satheeskumar R**, AI-driven biomarker discovery for early diagnosis and prognosis in oral oncology, *Oral Oncology Reports*, Volume 14, 2025, 100749, ISSN 2772-9060, <https://doi.org/10.1016/j.oor.2025.100749>. (**Elsevier, Scopus**)
11. **R. Satheeskumar**, "AI-driven diagnostics and personalized treatment planning in oral oncology: Innovations and future directions", *Oral Oncology Reports*, Volume 13, 2025, 100704, ISSN 2772-9060, <https://doi.org/10.1016/j.oor.2024.100704>. (**Elsevier, Scopus**).
12. **Satheeskumar R.**, Ch. V. Satyanarayana, Talatoti Ratna Kumar, Koteswara Rao M., Suresh M., "AI-Driven Alignment of Educational Programs with Industry Needs and Emerging Skillsets", *International Journal of Modern Education and Computer Science (IJMECS)*, Vol.17, No.3, pp. 15-28, 2025. DOI:10.5815/ijmeecs.2025.03.02. (**Scopus**)
13. Saranya, G., Amireddy, S., Indravati, C., **Satheeskumar, R.**, Chandana, S. (2026). Deep Learning in Adolescent Obesity Prevention: A Path to Health. In: Bansal, J.C., Borah, S., Hussain, S., Salhi, S. (eds) *Computing and Machine Learning. CML 2025. Lecture Notes in Networks and Systems*, vol 1614. Springer, Singapore. https://doi.org/10.1007/978-981-95-2878-3_45 (**Scopus**)

14. Suneetha, M., Muneer, S. K., Srikanth, S., Vamsi, S., **Satheeskumar, R.**, Moturi, S., & Reddy, D. V. (2025). Efficient monkeypox diagnosis via Attention-Based MobileNetV2 architecture. In *Smart innovation, systems and technologies* (pp. 253–265). https://doi.org/10.1007/978-981-96-6250-0_18. (**Scopus**)
15. **R. Satheeskumar**, E. Vandana Dutt, C. S. Reddy, Z. Gupta, S. Natarajan and M. L B, "Machine Learning Models for Predictive Marketing Analytics," *IEEE Xplore 2024 Second International Conference Computational and Characterization Techniques in Engineering & Sciences (IC3TES)*, Lucknow, India, 2024, pp. 1-5, doi: 10.1109/IC3TES62412.2024.10877468 (**Scopus**).
16. **Dr. R. Satheeskumar**, P. Chintamaneni, M. Naresh Kumar et al, "Mitigation Methods of Reducing DDOS Attack Frequency on Blockchain", *IEEE Xplore 2023 3rd International Conference on Advance Computing and Innovative Technologies in Engineering (ICACITE)*, Page(s):518 – 522, DOI: 10.1109/icacite57410.2023.10182584. (**Scopus**)
17. **Dr. R. Satheeskumar**, "Advancing Education: An In-depth Analysis of Artificial Intelligence in Children's Learning", *International Journal of Scientific Research in Computer Science and Engineering*, Vol.12, Issue.2, pp.08-14, April 2024, E-ISSN: 2320-7639. <https://ijsrcse.isroset.org/index.php/j/article/view/571>.
18. **Dr. R. Satheeskumar**, "Advancing Decision Review System (DRS) in Cricket: Harnessing AI for Enhanced Decision Making", *International Journal of Education and Management Engineering (IJEME) - MECS Press Journal*, Vol.13, No.6, pp. 25-32, 2023. DOI: <https://doi.org/10.5815/ijeme.2023.06.03>
19. **Dr. R. Satheeskumar**, "IMMUTABLE SECURE ONLINE ELECTORAL VOTING SYSTEM USING BLOCKCHAIN TECHNOLOGY", *Journal of Xidian University (UGC-CARE Approved Group 2 Journal ISSN NO: 1001-2400)*, VOLUME 17, ISSUE 8, 2023 PP: 1-10.
20. **Dr.R.Satheeskumar** , N. Eswararao 2023, "Accurate Detection of Cyberbullying on Social Media using BullyNet", *Journal of Interdisciplinary Cycle Research" UGC-CARE Group 'II' Journals List: Serial Number. 21259*, Volume 15, Issue 05, JUNE/2023 PP: 557-564, ISSN 0022-1945.
21. Kiran Kumar K, **Dr.R.Satheeskumar**, 2023, "Intrusion Detection System For Network Security using Bat Based Deep Learning", *The International journal of analytical and experimental modal analysis UGC-CARE Group 'II' Journals List: Serial Number. 36272*, Volume XV, Issue VI, May/2023 PP: 382-391, ISSN 0886-9367.
22. **Dr.R.Satheeskumar** 2022, "Optical and Intelligent Character Recognition System", *International Journal of Creative Research Thoughts - IJCRT" UGC Journal Id : 49023*, Volume 10, Issue 3 March 2022 - PP: 957-968, ISSN 2320-2882.
23. **Dr.R.Satheeskumar** 2022, "Face Detection using L*A*B using Color Space", *International Journal for Modern Trends in Science and Technology" UGC Journal Id : 43137*, Volume 8, Issue 02, February 2022-PP: 105-112, ISSN 2455-3778.

24. **Dr.R.Satheeskumar** 2022, “An Efficient Adaptive K-Means Based Brain Tumor Detection And Segmentation Using Deep Learning Scheme”, *International Journal of All Research Education and Scientific Methods- UGC Approved*, PP : 219-232, ISSN: 2455-6211.
25. **Dr.R.Satheeskumar**, Mondeddu navya, et al., 2021, “SMS Classification Method for Disaster Response using Naïve Bayes Algorithm” *International Journal For Advanced Researchs In Science & Technology*, ISSN 2457 – 0362, PP : 164-170.
26. **Dr.R.Satheeskumar**, Shaikafrin, et al., 2021, “Chronic Kidney Disease Predictions Using Machine Learning Models“ *International Journal For Advanced Researchs In Science & Technology*, ISSN 2457 – 0362, PP : 154-157.
27. **Satheeskumar, R & Saravanan, R** 2016, ‘An energy efficient dynamic scheduling hybrid MAC protocol for traffic adaptive wireless sensor networks’, *International Journal of Printing, Packaging & Allied Sciences*, vol. 4, no. 5, pp. 3176-3192, ISSN: 2320-4387 (Anna University Annexure- I, Serial Number: 5158).
28. Vijayasivaraman,S , **Satheeskumar, R**, & Anbuselvan, B, R 2014, ‘Secret Key Extraction for Wireless Networks During Data Transmission’, *International Journal on Recent and Innovation Trends in Computing and Communication*, vol. 2, no. 4, pp. 930-937, ISSN: 2321-8169.
29. **Satheeskumar, R**, Anbuselvan, B & Kasipandi,M 2013, ‘Design of Dependable and Trustworthiness of Data Communication In WSN’, *International Journal of Advanced Networking and Applications*, vol. 5, no. 3, pp. 1951-1956, ISSN: 0975-0290.

Book Chapter

1. Satheeskumar, R. (2025). Advanced AI and IoT-Enabled statistical modelling for road traffic surveillance and RealTime monitoring. In *BENTHAM SCIENCE PUBLISHERS eBooks* (pp. 209–232). <https://doi.org/10.2174/9798898811112125010014>. (**Scopus**).

CONFERENCES/SEMINARS/WORKSHOPS ATTENDED:

Paper Presented in Conferences:

- **Satheeskumar R** 2026, “OralTrust: A Transparent and Reliable AI System for OSCC Screening in Underserved Regions”, International Conference on Intelligent Methods and Advanced Computer Scientific Innovations (IMACSI-26), held on June 19th & 20th, 2026, organized by Aditya Degree and P.G. College (Autonomous), Lakshminarayana Nagar, Kakinada-533003, Andhra Pradesh, India.
- **Satheeskumar R** 2025, “Enhanced Hybrid Deep Learning Model for Cybersecurity Threat Detection Using CNN-BiLSTM and Feature Optimization”, 4th IEEE International Conference on Blockchain & Distributed Systems Security (IEEE ICBDS 2025), held on 30th, 31st October & 1st November 2025, organized by BSIET, Kolhapur.
- **Satheeskumar R** 2024, “Comparative Analysis of Object Detection and Recognition in Video Streams using Faster R-CNN, Mask R-CNN, and EfficientDet”, 6th International

Conference on Communication and Intelligent Systems (ICCIS 2024) Organized by Maulana Azad National Institute of Technology (MANIT), Bhopal, on 8th & 9th November 2024.

- **Satheeskumar R** 2024, “Overcoming the Obesity Epidemic: A Deep Learning Approach for Adolescent Prevention”, 2024 First International Conference on Innovations in Communications, Electrical and Computer Engineering (ICICEC 2024) held at Bapuji Institute of Engineering and Technology (BIET), Davangere, Karnataka, India during 24 – 25, October 2024. The conference is technically co-sponsored by IEEE Bangalore Section.
- **Satheeskumar R** 2018, “Mobility supervised algorithms and applications for mobile sensor networks”, National Conference on New Scientific Creation in Engineering and Technology [NSCET-2018], at Nadar Saraswathi College of Engineering and Technology on 16th March 2018.
- **Satheeskumar R** 2017, “A Secure And Dynamic Multi-Keyword Ranked Search Scheme Over Encrypted Cloud Data”, National Conference on New Scientific Creation in Engineering and Technology [NSCET-2017], at Nadar Saraswathi College of Engineering and Technology on 22nd March 2017.
- **Satheeskumar R** 2016, “BPR Based Infected Area Detection in WSN”, National Conference on New Recent Trends in emerging Technology [NCRTET-2016], at Nadar Saraswathi College of Engineering and Technology on 18th March 2016.
- **Satheeskumar R** 2016, “Private Information Retrieval Using Flooding Technique in Cloud Computing”, National Conference on Emerging Trends in Science, Commerce and Management, at Chettinad College of Engineering and Technology on 29th January 2016.
- **Satheeskumar R** 2015, “A Real-Time Automated System for the Recognition of Human Facial Expressions”, International Conference on Recent Computing and Communication Technology [ICRCCT ‘15], at St Michael College of Engineering and Technology on 20th March 2015.
- **Satheeskumar R** 2014, ‘Enhancing maximum life time using virtual backbone scheduling in WSN system’, IEEE Sponsored International Conference on Advanced computing, Control Systems, Machines, and Embedded technology – ICACT2014, at J.K.K Nataraja College of Engineering and Technology on 7th & 8th March 2014.
- **Satheeskumar R** 2014, ‘Real Time Location Verification Using Secure Distance Bounding Protocols’, IEEE Sponsored International Conference on Advanced computing, Control Systems, Machines, and Embedded technology – ICACT2014, at J.K.K Nataraja College of Engineering and Technology on 7th & 8th March 2014.

Seminar / Workshop / Guest Lecture Attended:

- One-week Online Faculty Development Program on “A Guide to Research Writing Tools: Enhancing Productivity and Quality” organized by Meadow Agriculture, Banda, India, from 01-07 November 2025.
- SIX-DAY Online Faculty Development Program on “Writing Successful Research Funding Proposals: Tips and Techniques” organized by Department of Computer Science and Engineering, Tirumala Engineering College, Narsaraopet, Guntur (Dt) from 23-06-2025 to 28-06-2025.
- One-week International Faculty Development Program on “Cutting-Edge Technologies in Computer Science” organized by the Department of Computer Science and Engineering & AI & ML, Eswari Engineering College, Chennai from 23rd September, 2024 to 29th September, 2024.
- National Level Five - Day Virtual FDP entitled "SEPT@ 360 Skill Enhancement Program for Teachers" held from Sept 2, 2024 To Sept 6, 2024 organized by IQAC OF SMCE &SUCAS.
- Five Days National Level Faculty Development Program On "EXPLORING COMPUTATIONAL INTELLIGENCE (ONLINE)” organized by School of Computer Science and Engineering, VIT-AP University, Amaravati from 16th July 2024 to 20th July 2024.
- Five Days Faculty Development Program on “Cognitive Computing for Smart Applications” organized by the Department of Artificial Intelligence and Data Science, Vishwakarma Institute of Information Technology, Pune from 18th March, 2024 to 22nd March, 2024.
- Five Days Faculty Development Program on Cloud Infrastructure (AWS) organized by Brainovision Solutions India Pvt Ltd in collaboration with All India Council for Technical Education (AICTE), from 21-08-2023 to 25-08-2023.
- One Week Faculty Development Program on Amazon Web Services (AWS) organized by Narasaraopeta Engineering College (Autonomous), Narasaraopeta - from 07-06-2023 to 13-06-2023.
- Two Days Seminar on Research Conclave '22: Exchanging Futuristic Ideas for Innovative Research organized by School of Computing, Vignan's Foundation for Science Technology & Research, Vadlamudi on 8th-9th July 2022.

- One Week Online International FDP on Next Generation Computing : Key Trends, Challenges and Opportunities organized by SRM Institute of Science & Technology, Ramapuram Campus from 18-04-2022 to 23-04-2022.
- Three days Awareness Program on “NBA ACCREDITATION PROCESS” from 5th to 7th June-2021 organized by the Malla Reddy Engineering College, Hyderabad.
- Six Days AICTE sponsored short term training program on “AI Powered solutions for Healthcare Innovations - Research Perspective” from 27th January 2021 to 1st February 2021, KCG College of Technology.
- Webinar on “Impacts of Machine Learning on IOT”, Organized by Department of ECE on 17.06.2020 - SCAD College of Engineering College.
- AICTE Sponsored Faculty Development Programme (FDP) On “Recent advances in big data analytics of IOT-devices using fog computing”, Conducted by Department Of Information Technology on December 14 – 26, 2020 – Malla Reddy College of Engineering & Technology.
- ‘Workshop on IT Elements’, LIVEWIRE, Theni, on 22nd May 2017.

PROFESSIONAL MEMBERSHIPS:

- Life Member of Indian Society for Technical Education (ISTE)
- IFERP membership, IAENG Membership

OTHER DETAILS:

- Approved External Co-Supervisor for Ph.D. scholars at Malla Reddy (MR) Deemed University, Hyderabad.
- Ph.D. Co-Supervisor, currently guiding one research scholar at Annamalai University.
- Head of the Department, Computer Science and Engineering – Narasaraopeta Institute of Technology from April 2021 to May 2024.
- Head of the Department, Computer Science and Engineering - BNEC from July 2012 to April 2021.

□ Reviewer for Journal of Communications and Networks (SCI Journal), Scientific Reports (Springer-SCI Journal), The Journal of Supercomputing (Springer-SCI Journal), Discover Artificial Intelligence, International Journal of Machine Learning and Cybernetics, Discover Telecommunications, Discover Computing.