

FACULTY PROFILE

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Academic Qualification

- M.E., 2011, Computer Science and Engineering, PSR Engineering College, Sivakasi – First Class – 8.37 CGPA.
- B.E., 2009, Computer Science and Engineering, PSR Engineering College, Sivakasi – First Class – 73%.

Professional Experience

Institution / Organization	Designation	Period
National Engineering College, Kovilpatti	Assistant Professor	04.08.2021 – till date
PSR Engineering College, Sivakasi	Assistant Professor	02.05.2011 – 03.11.2016

Research Area

Data Science, Data Analytics, Computer Vision

Publications (Scopus Indexed)

1. "A Fuzzy-Siamese Framework With Triplet Loss For Early Tomato Leaf Disease Diagnosis", Renuka Sre V, Smega M, Ruthra Varshini S, Anitha V, Kalaiselvi S, **Santhi S**, IEEE Xplore, Feb 2025, pp. 1-4, DOI: 10.1109/ICERCS63125.2024.10895024.
2. "Enhancing Solar Energy Efficiency: A Deep Learning approach for Dust Detection", Vigna Harish R, Ramya A, Siva S, **Santhi S**, Kalaiselvi S, Anitha V, IEEE Xplore, Feb 2025. DOI: <http://doi.org/10.1109/ISENSE63713.2024.10872376>.
3. "Demand Forecasting for Market Basket Analysis", S. Alex, K. Satish, V. Anitha, S. Kalaiselvi & **S. Santhi**, Lecture Notes in Electrical Engineering (LNEE, volume 1237), Springer, Singapore, pp 261-272, Feb 2025. DOI: https://doi.org/10.1007/978-981-97-6802-8_21.

4. "Smart Water and Light Control System for Greenhouses", Divya Shree S, Manimegalai M, **Santhi S**, Suguna R, Malathi M, IEEE Xplore, Jan 2025. DOI: <http://doi.org/10.1109/ICACRS62842.2024.10841499>.
5. "Vec2T5: A Chatbot Integrating Word2Vec and T5 for Improved Performance", R. Inisha Sallove, T. Mahalakshmi, V. Renuka Sre, **S. Santhi**, V. Anitha, IEEE Xplore, Dec 2024. DOI: <http://doi.org/10.1109/ICICNIS64247.2024.10823146>.
6. "Multi-Convolutional Neural Network Based Crowd Counting Using VGG-19 Architecture", John Pradeep J, Raja Arumugham M, **Santhi S**, Kalaiselvi S, Lecture Notes in Electrical Engineering, Springer, Singapore, vol 1220, pp 365-378, 2024. DOI: https://doi.org/10.1007/978-981-97-4650-7_27.
7. "A Decentralized Fog Architecture for Video Preprocessing in Cloud-based Video Surveillance as a Service", Divya G, Swetha K, Siva Shruthika S, Guru Santhosh P, **Santhi S**, Kalaiselvi S, IEEE Xplore, May 2024, Page(s): 904 - 910. DOI: [10.1109/ICC-ROBINS60238.2024.10533958](http://doi.org/10.1109/ICC-ROBINS60238.2024.10533958).
8. "Density Map Based Estimation of Crowd Counting Using Vgg-16 Neural Network", Anusiya G, Nandha Kumar S, Siva Sangari V, **Santhi S**, IEEE Xplore, May 2023, Page(s):704 - 708. DOI: [10.1109/ICACCS57279.2023.10113006](http://doi.org/10.1109/ICACCS57279.2023.10113006).
9. "A Recommendation System for Crop Prediction Under Diverse Weather Conditions", P ShunmugaLakshmi, V Ram Kishore, Pillai Pratham Ramachandran, **S Santhi**, S Kalaiselvi, IEEE Xplore, May 2023, Page(s):1704 - 1709. DOI: [10.1109/ICACCS57279.2023.10112944](http://doi.org/10.1109/ICACCS57279.2023.10112944).

International Journal Publications

1. "Electricity Price Prediction using Artificial Neural Network", Indujaa.M, Anusuya.N, **Santhi.S**, International Journal of Special Education, Vol.37, No.3, Page(s): 15172-15181, 2022.
2. "Minority Oversampling Technique for Imbalanced Dataset Learning using Agglomerative Clustering", **Santhi S**, Anitha R, International Journal of Emerging Technology and Innovative Engineering, Vol 1, Issue 3, March 2015 (ISSN: 2394 - 6598).

Book Chapters

1. "A Sentimental Analysis of Legal Documents Using Mask Attention BERT Networks", in Revolutionizing Data Science and Analytics for Industry Transformation, Chapter 10, pages 243-264, IGI Global Scientific Publishing, ISBN13: 9798369378687, 2025. DOI: 10.4018/979-8-3693-7868-7.ch010.

International & National Conference Participations

1. Vec2T5: A Chatbot Integrating Word2Vec and T5 for Improved Performance at 5th International Conference on IoT Based Control Networks and Intelligent Systems (ICICNIS 2024) organized by T. John Institute of Technology (TJIT), Bangalore during 17th and 18th December 2024.

2. Enhanced Vehicle Detection and Traffic Density Analysis Using Fine-Tuned YOLOv8 at 4th International Conference on Emerging Electronics and Automation (E2A-2024) organized by the Department of Electronics and Instrumentation Engineering, National Institute of Technology, Silchar during 9th to 11th December 2024.
3. Enhancing Solar Energy Efficiency: A Deep Learning approach for Dust Detection at International Conference on Smart Electronics and Communication Systems 2024 (ISENSE 2024) organized by Dept. of Electronics and Communication Engineering, Indian Institute of Information Technology Kottayam, Kerala during 6th and 7th December 2024.
4. Development of Efficient Deep Convolutional Neural Network for Prediction of Leaf Disease Identification in Agriculture at the 1st International Conference on Data, Computation and Communication (ICDCC-2024) organized by the School of Computing Science Engineering and Artificial Intelligence (SCAI), VIT Bhopal during November 29 - 30, 2024.
5. A Decentralized Fog Architecture for Video Preprocessing in Cloud-based Video Surveillance as a Service at International Conference on Cognitive Robotics and Intelligent Systems (ICC - ROBINS) organized by KPR Institute of Engineering and Technology, Coimbatore during 17 - 19 April 2024.
6. Demand Forecasting for Market Basket Analysis, at 3rd International Conference on Emerging Electronics and Automation organized by National Institute of Technology, Silchar during 15th - 17th Dec, 2023.
7. Multi-Convolutional Neural Network Based Crowd Counting Using VGG-19 Architecture at International Conference on Robotics, Control, Automation and Artificial Intelligence (RCAAI 2023) organized by Manipal Academy of Higher Education (MAHE), Manipal during 12th - 14th October 2023.
8. Density Map Based Estimation of Crowd Counting Using Vgg-16 Neural Network at 9th International Conference on Advanced Computing and Communication Systems (ICACCS) organized by Sri Eshwar College of Engineering, Coimbatore during 17 and 18 March 2023.
9. A Recommendation System for Crop Prediction Under Diverse Weather Conditions at 9th International Conference on Advanced Computing and Communication Systems (ICACCS) organized by Sri Eshwar College of Engineering, Coimbatore during 17 and 18 March 2023.
10. Weather Based Crop Prediction Using KNN at First International Conference on Artificial Intelligence and Blockchain (ICAIBC-2023) organized by Bannari Amman Institute of Technology, Sathyamangalam during 5th and 6th January 2023.
11. Electricity Price Prediction using Artificial Neural Network at Second International Conference on Artificial Intelligence and Smart Computing (ICAISC - 2022) organized by Bannari Amman Institute of Technology, Sathyamangalam during 11th and 12th March 2022.

12. Minority Oversampling Technique for Imbalanced Dataset Learning using Agglomerative Clustering at International Conference on Recent Advances and Innovations in Engineering & Technology (ICRAIET' 15) organized by Ranganathan Engineering College, Coimbatore.
13. Energy Efficient Data Transmission in Multipath Routing Protocol with Digital Signature Based Security in Wireless Sensor Networks at National Conference on Recent Trends in Information Technology (ENSERC -13) organized by EASA College of Engineering & Technology, Coimbatore.
14. Fingerprint Recognition based on Minutiae and Orientation at National Conference on Recent Trends in Information Technology (NCRTIT'11) organized by Kamaraj College of Engineering & Technology, Virudhunagar.

Technical Events Attended

S No	Title	Programme	Duration	Venue
1.	Unleashing the power of Generative AI: A Hands-on Approach	FDP	10.02.2025 to 15.02.2025	Puducherry Technological University, Puducherry
2.	Big Data Computing	NPTEL - AICTE FDP	Aug - Oct 2024	Online
3.	Deep Learning	FDP	Sep 2024 (1 Month)	Online (Organized by SkillDzire colab with AICTE)
4.	Deep Learning - An Industrial Approach and Hands -on Training	FDP	16.08.2024 & 17.08.2024	National Engineering College, Kovilpatti
5.	Big Data Analytics	Anna University - FDTP	22.07.2024 to 27.07.2024	National Engineering College, Kovilpatti (Online)
6.	Edge Computing	NPTEL - AICTE FDP	Jan - Mar 2024	Online
7.	Machine Learning, Data Science and Gen AI	STTP	05.02.2024 to 16.02.2024	KPR Institute of Engineering and Technology (Online)
8.	Cloud Practitioner (AWS)	Workshop	26.12.2023 to 30.12.2023	National Engineering College, Kovilpatti
9.	Deep Learning for Natural Language Processing	SERB Sponsored Workshop	18.12.2023 to 22.12.2023	National Institute of Technology, Trichy
10.	Virtual Faculty Buildathon - AI/ML with Cloud	Training	21.11.2023 to 02.12.2023	IBM SkillsBuild
11.	Machine Learning in the age of AI: Algorithms, Models and Beyond	Faculty Development Program	21.08.2023 to 01.09.2023	KPR Institute of Engineering and Technology (Online)
12.	Design Thinking - A Primer	NPTEL - AICTE FDP	July - Aug 2023	Online
13.	Data Mining	NPTEL - AICTE FDP	Jan - Mar 2023	Online
14.	Machine Learning for Data Science using Python	Short Term Course	01.12.2022 to 15.12.2022	National Institute of Technology, Warangal (Online)

S No	Title	Programme	Duration	Venue
15.	CS8091 – Big Data Analytics	Anna University – FDTP	03.01.2022 to 08.01.2022	National Engineering College, Kovilpatti (Online)
16.	AICTE Student Learning Assessment – STTP – PARAKH	Training Program	10.01.2022 to 23.01.2022	Online
17.	Foundations of Data Science and Machine Learning for Cross – Domain Applications	ATAL FDP	27.12.2021 to 31.12.2021	PSG College of Technology, Coimbatore (Online)
18.	Predictive Analytics in the Cloud	Short Term Course	12.10.2015 to 18.10.2015	Coimbatore Institute of Technology, Coimbatore
19.	MICROSOFT’S Hands on HADOOP Big Data	Workshop	11.09.2015	Coimbatore Institute of Technology, Coimbatore
20.	Cloud Computing Solutions for Genomics Analysis	Seminar	09.07.2015 & 10.07.2015	National Engineering College, Kovilpatti
21.	Advancements in Brain Image Analysis towards Research	Workshop	01.03.2013 & 02.03.2013	P.S.R. Engineering College, Sivakasi
22.	Skilledge – Problem Solving in C & C++	Workshop	03.09.2012 & 04.09.2012	P.S.R. Engineering College, Sivakasi
23.	Transform Techniques in Signal and Image Processing	Seminar	14.06.2012 & 15.06.2012	P.S.R. Engineering College, Sivakasi
24.	Cloud Computing	Seminar	22.01.2011	IETE – Trivandrum – Nagercoil PAC, District Science Center – Tirunelveli

Online Courses Completed

S No	Title	Programme	Score	Date
1.	Big Data Computing	NPTEL	Elite + Silver	Aug – Oct 2024
2.	Computer Vision – Object Detection on Videos – Deep Learning	Udemy	-	April 2024
3.	Edge Computing	NPTEL	Completed	Jan – Mar 2024
4.	Cloud Foundations	AWS Academy	-	Dec 2023
5.	Design Thinking – A Primer	NPTEL	Elite + Silver	July – Aug 2023
6.	Introduction to Data Science	Course – Cisco Networking Academy	-	June 2023
7.	Data Mining	NPTEL	Elite	Jan – Mar 2023
8.	Python for Absolute Beginners	Udemy	-	Jan 2023
9.	Cloud Computing	NPTEL	Elite	Aug – Oct 2021

Courses Taught

- Big Data Analytics
- Data Engineering
- Computer Organization and Architecture
- Operating Systems
- Data Structures
- Data Mining and Data Warehousing

- Java Programming
- Web Technology
- System Software and Compiler Design
- Professional Ethics in Engineering

Specific / Remarkable Credentials in Academic & Administration

- Associating in NBA & NAAC works
- Contributed in AICTE & Anna University Affiliation works
- Representing as a Member in College Software Development Section