Faculty Profile



Mr. S. Manickam , M.E., (Ph.D)
Assistant Professor(OG) – Department of Artificial Intelligence and Machine Learning

HIGHLIGHTS:

- Number of Journal Publications: **4**
- H-Index: **2**
- Patents Published: **4**
- Patents Granted: **3**

PROFESSIONAL LINKS:

- Scopus ID: AU-ID (**"Manickam, S." 59473179300**)
- Scopus Link: https://www.scopus.com/authid/detail.uri?authorId=59473179300
- Google Scholar ID: **https://scholar.google.co.in/citations?hl=en&user=sH07ZUYAAAAJ**
- ORCID: 0009-0009-4889-4553
- Anna University Faculty ID: **2631071992**
- AICTE Faculty ID: **19378111625**
- LinkedIn: **https://www.linkedin.com/in/manickam-s-2a900197/**

PROFESSIONAL BACKGROUND:

- Teaching Experience till date: **6 Years**
- Industrial Experience: **3 Years**

AREA OF SPECIALIZATION:

- Data Analytics
- Machine Learning
- Data Structures and Algorithms
- Artificial Intelligence
- Computer Networks

JOURNAL PUBLICATION:

1. **[Q1, Annexure Journal] Manickam, S.**, Pandiyan, G., Mariprasath, T. et al. **A robust ensemble learning model for short-term wind power forecasting using multi-height wind features**. Scientific Reports,(2026) https://doi.org/10.1038/s41598-026-68719-9

2. **[Q1, Annexure Journal] Manickam, S.** and Kesavaraja, D., 2026. **Leveraging Latent Space Representations for Accurate Wind Power Prediction**. *Applied Soft Computing*, p.114438. Elsevier https://doi.org/10.1016/j.asoc.2025.114438

3. [**Q2 Journal**] P Muthuvel, Pandiyan G, **Manickam S**, and Rajesh C. "**Optimising Road Networks: A Graph-Based Analysis with Path-finding and Learning Algorithms**." International Journal of Intelligent Transportation Systems (2024): 1-15. https://doi.org/10.1007/s13177-024-00453-w

4. **[Scopus] S. Manickam** and D. Kesavaraja, "**Secure multi-server authentication system using elliptic curve digital signature**," 2016 International Conference on Circuit, Power and Computing Technologies (ICCPCT), Nagercoil, India, 2016, pp. 1-4, doi:10.1109/ICCPCT.2016.7530333.

PATENTS PUBLISHED/GRANTED:

1. **Patent Published** in the title of **"MACHINE LEARNING-DRIVEN ADAPTIVE RESOURCE ALLOCATION FOR CLOUD-INTEGRATED IOT NETWORKS "** by 1)Mr.Ravi Kumar Tenali 2) Ms. Anitha Potnuri 3) Dr.G.Pandiyan 4)**Mr. S.Manickam** 5)Mr.Sam Basil Fernand S in the Indian Patent Journal on 05.09.2025**.**

2. **Patent Published** in the title of **"NON-INTRUSIVE RETROFIT ADAPTER FOR REAL-TIME ENERGY MONITORING AND APPLIANCE PROFILING USING EDGE-AI "** by 1)Dr. S.Marisargunam 2)Dr. P.Muthuvel 3)**Mr. S.Manickam** in Indian Patent Journal on 29.08.2025**.**

3. **Patent Published** in the title of **"INTELLIGENT SELF-CLEANING SYSTEMS FOR SOLAR PANELS"** by 1)Dr. S.Marisargunam 2)Dr. P.Muthuvel 3)**Mr. S.Manickam** in Indian Patent Journal on 14.03.2025**.**

4. **Patent granted** for the design of "**IOT BASED AGRICULTURE ROBOT FOR PESTICIDES SPRAYING"** in the name of 1. Saveetha Engineering College 2. Dr.G.Pandiyan 3. Dr. P. Muthuvel 4. Mr. Rajesh C 5. **Mr.S.Manickam** on 29.08.2024**.**

5. **Patent granted** for the design to "**SMART ROBOTICS USING IOT AND ML TECHNIQUES"** in the name of 1. **Saveetha Engineering College** 2. **Mr.S.Manickam** on 13.06.2024**.**

6. **Patent granted** for the design of "**MICROWAVE SENSOR BASED SOIL ANALYZER**" in the name of 1. Mr. Muthupandi G 2. Dr. Joe Patrick Gnanaraj S **3. Mr. Manickam S** 4. Mr. Sivakumar G 5. Mrs. Sweetline Arputham J 6. Mr. Ponithish N 7. Dr. Felcia Jerlin I on 22.03.2024.

7. **Patent Published** - Dr.Amarnath Dr.Dande Swaona Sree, Dr.P.Periya samy, Dr.Karthikeyan palaniappan, Mrs.P.Joy Suganthy Bai, Somnath Das, **Manickam.S** "**IOT AND ARTIFICIAL INTELLIGENCE BASED RECOGNITION, CALORIE ESTIMATION AND**

SUGGESTION FOR HEALTHY LIFE USING DEEP LEARNING ALGORITHM" Indian Patent Journal, September 2022.

COURSES CERTIFIED:

Si. No	Course Title	Organisation	Grade	Duration
1	The Joy of Computing Using Python	NPTEL	82%-Silver	Jul-Oct 2024(12 Weeks)
2	Entrepreneurship	NPTEL	78% - Silver	Jul-Oct 2023 (12 Weeks)
3	Introduction to Machine Learning	NPTEL	71%- Elite	Jan-Apr 2023 (12 Weeks)
4	An Introduction to AI	NPTEL	54% - Completed	Jan-Apr 2023 (12 Weeks)
5	Learning Analytics Tools	NPTEL	85% - Silver	Jul-Oct 2022 (12 Weeks)
6	Python for Data Science	NPTEL	76% - Silver	Jul-Aug 2022 (4 Weeks)
7	Data Science for Engineers	NPTEL	69% - Elite	Jul-Sep 2022 (8 Weeks)
8	Deep Learning	NPTEL	71% - Elite	Jan-Apr 2022 (12 Weeks)

ACHIEVEMENTS AND AWARDS:

- Awarded as an "NPTEL STAR" for getting SWAYAM-NPTEL **Domain certification in "Data Science**" (computer science) in the period April 2023.
- **NPTEL** Local Chapter **SPOC** of Grace College of Engineering from Jan 2022 to Dec 2023
- **IIC – Innovation Ambassador.(Complete upskill certification during 25-26)**

CONFERENCES/SEMINARS/WORKSHOPS ATTENDED:

FDP:

- FDP on Artificial Intelligence Edge – Soft Computing Sponsored by **ATAL** at Dr.Sivanthi Aditanar College of Engineering, Tiruchendur, from 09.12.2024 to 14.12.2024.
- FDP on "The Joy of Computing Using Python" by NPTEL from July 2024 to Oct 2024
- 5-Day online FDP on "**Advancement in Computing Technologies and Internet of Things**" in the School of Computer Science and Engineering at VIT, Chennai, from 21.10.2024 to 25.10.2024.
- One-day online **IP Training Program** under the scheme of the "National Intellectual Property Awareness Mission," organised by the Intellectual Property Office, India, on 24.07.2024.
- One-day online **FDP** on "**Transversal Skills in Applied Artificial Intelligence**" organised by St. Aloysius College, Elthuruth, Thrissur, on 17.07.2024.
- One-week online **FITP** (Faculty Industry Training Programme) on "**Explainable Artificial Intelligence (XAI Technology)"** in Association with **MIT Square, London,** organised by the Department of Computer Science and Engineering, **SRM Institute of Science and Technology**, Ramapuram, Chennai, from 08.07.2024 to 12.07.2024.

- One-week online **FDP** on "**Machine Learning**" organised by St. Joseph College of Engineering, Sriperumbudur, Chennai – 602117, from 24.06.2024 to 28.06.2024.

- FDP on Emerging Desalination Technologies: Challenges and Future Trends", sponsored by ATAL at St.Mother Theresa Engineering College, Thoothukudi, from 06.11.2023 to 11.11.2023.
- FDP on "Entrepreneurship" by NPTEL from July 2023 -Dec 2023
- **FDP on "**Artificial Intelligence and Machine Learning/Deep Learning", organised by the Department of CSE, DRK College of Engineering, Hyderabad, from 20.02.2023 to 24.02. 2023
- **FDP on "**Cyber Security" organised by College of Engineering, Roorkee, Uttarakhand, from 6.02.2023 to 10.02.2023.
- FDP on "Learning Analytics Tools" by NPTEL from July 2022 to December 2022
- FDP on "Data Science for Engineers" by NPTEL from July 2022 - Sept 2022
- FDP on "Python for Data Science" by NPTEL from July 2022 - Aug 2022
- FDP on "Innovation and Entrepreneurship Development Programme", organised by Anna University - Regional Campus, Tirunelveli, sponsored by **EDII-TN** from 29.09.2022 to 01.10.22.
- FDP on "CS8082 -Machine Learning Techniques", organised by Anna University Regional Campus, Tirunelveli, from 04.07.2022 to 8.07.2022
- **FDP on "**Deep Learning" by NPTEL from Jan 2022 to Apr 2022
- **FDP on "**Artificial Intelligence in Healthcare" organised by the Department of CSE in association with **ISTE,** SAIRAM Engineering College, Chennai, from 21.02.2022 to 25.02.2022.
- **FDP on "**Sensor Data Analytics" sponsored by ATAL at the Indian Institute of Information Technology-Kottayam from 29.11.2021 to 04.12.2021
- FDP on "Internet of Things (IoT)" sponsored by **ATAL at** Punjabi University, Patiala from 08.11.021 to 12.11.20221.
- **FDP on "**CS8791-Cloud Computing" by Loyola -ICAM College of Engineering, sponsored by **Anna University from** 24.05.2021 to 29.05.2021.

Conferences:

National Conferences:

- "Secure Service Authentication Using Biometric-Based Smart Cards", Dr.Sivanthi Aditanar College of Engineering- Tiruchendur-628215 on 29.04.2016.

- "Big Data Security with Collaborative Intrusion Detection", Dr.Sivanthi Aditanar College of Engineering- Tiruchendur 628215 on 10.04.2015.

International Conferences:

- "A Context-Aware Multi-Criteria Decision Making Framework for Wind Energy Site Selection", at International Seminar IACMI-2026, Dr Sivanthi Aditanar College of Engineering, Tiruchendur, on 06-02-2026. DOI: doi.org/10.34293/shanlax.9789361631474.ch013
- "Species Prediction Using Machine Learning Technique" at OCT 23, JACSI College of Engineering, Thoothukudi-628617 on 26.04.2023
- "Autonomous Speech Recognition Model in Edge-Computing for the Smart Device" at SMTBEA-2022, SSN Institutions - Chennai-630110 from 13.07.2022 to 17.07.2022.
- "Secure Multi-Server Authentication System Using Elliptic Curve Digital Signature", at ICCPCT 2016, Noorul Islam University – Kanyakumari- 629180 on 18.03.2016.

OTHER DETAILS (If any):

- Qualified **in UGC-NET** December 2019 for Assistant Professor in Computer Science and Application.