FACULTY PROFILE



Dr. K. MALATHI, M.E., Ph.D.
Associate Professor – AIML -SEC

HIGHLIGHTS:

Scopus:

- Number of Journal Publications: 18
- H-Index:6
- Citation: 150

Google Scholar:

- Number of Journal Publications: 26
- H-Index:6
- i-10 Index: 6
- Citation: 185

ResearchGate:

- Research Interest Score: 119.8
- H-index - 4

- Citations: 157

Web of Science: Profile summary

- Total documents :21
- Publications indexed in Web of Science:13
- Web of Science Core Collection publications:3
- Preprint:1
- Verified peer reviews:6

Project Funding Received; NIL

Patents Published :10

Patents Granted: 1

PROFESSIONAL LINKS:

- Scopus ID : 57216388293
- Scopus Link : https://www.scopus.com/authid/detail.uri?authorId=57216388293
- Google Scholar: ID : https://scholar.google.com/citations?user=9_rS-34AAAAJ&hl=en
- Anna University Faculty ID: 1-11321284628
- AICTE Faculty ID: 2664561982
- Linked In : https://www.linkedin.com/in/dr-malathi-k-5351b7224/
- ResearchGate: https://www.researchgate.net/profile/Malathi-k-2
- MSME STARTUP UDYAM ; Name of Enterprise BLOOM AGRI
- Vidwan https://vidwan.inflibnet.ac.in/profile/439163
- Publons: https://www.webofscience.com/wos/author/record/IYJ-3550-2023
- Web of Science ResearcherIDIYJ-3550-2023
- SSRN :https://hq.ssrn.com/submissions/MyPapers.cfm?partid=6873722&redirectFrom=true
- Yukti https://yukti.mic.gov.in/team-lead/innovation-repository
- Academia: https://www.academia.edu/?from_navbar=true&trigger=nav
- ORCID: https://orcid.org/0000-0002-4040-1832

PROFESSIONAL BACKGROUND:

- Teaching Experience till date: 14 years

INTERNATIONAL EXPOSURE:

- Intermediate College -IGCSE -KL - STEM (Science Technology Engineering and Mathematics)

AREA OF SPECIALIZATION:

- Cloud Computing
- IOT – Internet of Things
- Artificial Intelligence
- Machine Learning

Sponsored Research / Funding Applied / Consultancy :

ATAL FDP APPLIED:

FACULTY DEVELOPMENT PROGRAMME (FDP) for the academic year 2024-2025 applied on 31-05-2024

TIDE APPLIED:

HEALTHCARE COMPANION FOR ELDERLY AND PHYSICALLY DISABLED PEOPLE -SMART WATCH - Technology Interventions for Disabled and Elderly (TIDE)-SUBMISSION OF PROJECT PROPOSALS ,2023 - UNDER SEED DIVISION OF DST -Science for Equity, Empowerment & Development Division (SEED),Department of Science & Technology,Technology Bhavan, New Mehrauli Road,New Delhi–110016

MSME APPLIED :

MSME IDEA HACKATHON 6.0

1. IOT CLOUD BASED PREDICTIVE ENERGY INTELLIGENCE SYSTEM FOR SMART MSME BUILDINGS - 26INC06TN019752

2. IOT ROBOTICS BASED REMOTE MACHINE MONITORING SYSTEM FOR RURAL MSME'S TO ENABLE REAL TIME DIAGNOSTICS AND REDUCE MAINTENANCE COSTS- 26INC06TN032076

PROJECT PROPOSAL :

Project Proposal under NQM PROGRAM 2025-2026 -Under the Department of Science and Technology -New Delhi

PATENTS PUBLISHED :10

GRANTED:1

1. Application Number: Design Patent 202241042943 -Title: Hybrid Lion -GA Optimization Algorithm using Python for Effective Task Scheduling, CBR NUMBER: 29870, Date of filing of Application: 27/07/2022, Published Date: 05/08/2022;
2. Application Number: 202441048275 A - Title: Malaria Infected Red Blood Cells Using Image Processing and Machine Learning, Date of filing of Application:24/06/2024, Published Date: 05/07/2024
3. Application Number: 202441058297 - Title: Wearable IoT Device for Road User Safety with Machine Learning-Based Gesture Recognition. Date of filing of Application: 01/08/2024, Published Date: 09-08-2024
4. Application Number: Design Patent 426236-001 - Title: AI based device for predicting maintenance of industrial machine, Date of filing of Application: 08/08/2024, Published Date: 22/10/2024
5. Application Number: 202441077836 - Title: Blockchain based medical data storage device for secure and tamper proof health information management, Date of filing of Application: 14/10/2024, Published Date 25/10/2024
6. Application Number: 202541009233 Title: Automated Traffic Flow Prediction and Accident Detection Using Deep Reinforcement Learning and Spatiotemporal Analysis, Date of filing of Application: 4/02/2025, Published Date 14/02/2025
7. Application Number: 202541065736 A Title: DEEP LEARNING-ENABLED ANOMALY DETECTION SYSTEM FOR SMART IOT SENSORS IN CLOUD PLATFORMS , Date of filing of Application: 10/07/2025, Published Date 25/07/2025
8. Application Number: 202541068543 A , Title: INTELLIGENT IOT DEVICE DISCOVERY AND LIFECYCLE MANAGEMENT LEVERAGING MACHINE LEARNING AND CLOUD APIS , Date of filing of Application: 18/07/2025, Published Date 25/07/2025
9. Application Number: 202541076386 A Title: SCALABLE CLOUD BASED NEURAL NETWORK TRAINING INFRASTRUCTURE FOR HIGH VOLUME IOT SENSOR , Date of filing of Application: 11/08/2025, Published Date 05/09/2025
10. Application Number: 202641075978 A Title: AUTOMATED WEED DETECTION AND REMOVAL MACHINE , Date of filing of Application: 19/06/2026, Published Date 26/06/2026
11. Application Number: 202641075980 A, Title: AI-DRIVEN PREDICTIVE MAINTENANCE SYSTEM FOR INDUSTRIAL MACHINERY , Date of filing of Application: :19/06/2026, Published Date 26/06/2026

COURSES CERTIFIED:

IIECP

- IUCEE INTERNATIONAL ENGINEERING EDUCATOR CERTIFICATION PROGRAM SPRING 2025
- IUCEE FELDER BRENT - CERTIFIED 2026

AWS

- AWS ACADEMY GRADUATE -Cloud Data Pipeline Builder
- AWS ACADEMY -Cloud Security Foundations
- AWS ACADEMY - Cloud solutions Architect
- AWS ACADEMY- Cloud Foundations
- AWS SKILL BUILDER -AWS certified cloud Practitioner

UDEMY

- UDEMY- **QC101 Quantum Computing &Intro to Quantum Machine Learning-**15 – July-2025
- UDEMY – **GEN AI FOR PROFESSIONALS:10X YOUR PRODUCTIVITY** - 21 -Jan -2025
- UDEMY – **Build Generative AI Apps and Solutions with No-Code Tools** -20 -Jan -2025
- UDEMY - **Python Data Analytics Real-world hands-on Projects** 28-09-2024

UDEMY -**Python complete course and Flask Framework, HTML Essentials** – 3-11-2024

COURSERA

- **PROFESSIONAL CERTIFICATE - AWS Cloud Solutions Architect -** 29-09-2024
- **Building Data Lakes on AWS** -22-09-2024
- **Architecting Solutions on AWS** -1-09-2024
- **AWS 204 Technical essentials** – August 2024
- **AWS – Cloud Practitioner essentials** 2024 – August 2024

SCALER MASTERCLASS

Certificate of participation **– Fundamentals of Docker & Kubernetes -27 Feb 2025**

EDUNET FOUNDATION

- Next Gen 3.0 FDP - **Building Web Development Solutions with Cloud Computing** 11-11-2024 to 15-11-2024

IETE

- MC 21 Days Masterclass on **STM32 - Nucleo 64** – 9-09-2024 TO 29-09-2024

NPTEL

- NPTEL course certificate on **Fundamentals of Artificial Intelligence** -October 2023
- NPTEL course certificate on **Cloud Computing** - October 2023
- NPTEL course certificate on **Google cloud Computing Foundations** -Nov 2024 -ELITE
- NPTEL course certificate on **Introduction to Industry 4.0 and Industrial Internet of things -**April 2024 -ELITE
- NPTEL course certificate on **Big Data Computing** -2025-ELITE -SILVER
- NPTEL course certificate on **Foundation of Cloud Iot Edge ML-**2025-ELITE
- NPTEL course certificate on **Mathematical Foundation of Machine Learning**-APRIL 2026
- NPTEL course certificate on **Python for Data Science** -OCT 2026

INFOSYS SPRINGBOARD

- **Generative Models for Developers** – 05 -May-2025
- **Course certificate on Basics of Python**, 08-Jan-2024
- **Getting Started with Power BI services** -18-08-2024

PANTECH E-LEARNING

- **Completed - Master class on Deep learning** – Oct 2023 –

KONMA FLAIR -TTT

- Completion Certificate - Awarded for the -**TRAIN THE TRAINER Program covering the Fundamentals, use cases and impact of Blockchain** ,7-11-2022
- TTT program on **Block Chain Technologies** - **Konma** on 19-12-22

ACHIEVEMENTS AND AWARDS:

- **REVIEWER - I5CPS 2026 - NIT PUDUCHERRY, FEB 26,27 ,2026**

- **Best Paper Award - DST** -SERB Sponsored International Conference on Advances in Nanomaterial Based Sensors: Impacting Environmental Pollution Detection through Artificial Intelligence ICANS ’24 -19 and 20 December 2024 -SEC

- **Certificate of Merit -** International Conference on Research Conclave 2024 -Puducherry - Chennai Institute of Management and Technical Science CIMATS – Paper Title: Hybrid ML and Data Analytics for small scale Industries Financial Data Management. 22 DEC 2024

- **Chief Guest and Guest Lecture** on Cloud Computing Solutions and Services and Block Chain Technologies- Dept. MBA and IQAC - SEC -31-Dec-2024 -10 to 12 PM

- **Easy chair – Conference Reviewer - International Conference on Innovation, Sustainability and Applied Sciences (ICISAS 2025) SRMIST, Kattankulathur**

- **Chief Guest and Judge** - Regional level Science Exhibition - Central Board of Secondary Education -Nov 2024

- ATAL FDP NOV 2024 -SEC - **Session Chair** – **Key note speaker - Journal** Discussion

- **Excellence in peer reviewing** Certificate – September2024, November 2024

- IGI Global **Book Reviewer**

- **Microsoft CMT Conference Reviewer – ICSTSN2024, ICSTSDG2024, ICSTSN2025, ICACT conf2024, ICoACT 2025, ICONDEEPCOM, Fourth International Conference on Smart Technologies and Systems for Next Generation Computing (ICSTSN 2025)**

- **ICSTSN2024, ICSTSDG2024, ICSTSN2025, ICACT conf2024**

- **Journal Reviewer**

    1. Reviews On Recent Clinical Trials.
    2. Asian Journal of Research in Computer Science
    3. Asian Journal of Research in Physics
    4. Journal of Basic and Applied Research International - 2024
    5. WOS - Journal of Basic and Applied Research International 19-02-2025
    6. Current Journal of Applied Science and Technology
    7. Fourth International Conference on Smart Technologies and Systems for Next Generation Computing (ICSTSN 2025)
    8. Springer Nature -ICISAS 2025
    9. Journal of Engineering Research and Reports Certificate of Excellence in Reviewing (3-May - 2025)

- Conference ICANS ’24 DST -SERB Sponsored – Technical **Team**

- **Best Faculty Award** - JJ College of Engineering and Technology -2006

SPECIAL SESSIONS DELIVERED:

1. Organized Workshop - AI ARENA -DRESTEIN WORKSHOP -sep 11, 2026 - 10 TO 12 NOON
2. Resource Person -EVENT - QUANTUM CLOUD COMPUTING :TRENDS AND CHALLENGES -29 AUG 2026 -1 TO 3 PM
3. Organized event - AI TRENDS IN CORE INDUSTRIES - 29-Aug 2026 - 10 to 12 Noon
4. Faculty Co ordinator -EVENT -HACK TO DEFEND - 23 MAY 2026- 8 TO 10 AM
5. Resource Person - AI POWERED CLOUD OPTIMIZATION -AI TOOLS used in Modern cloud Platforms , 23 May 2026 ,10 to 12 noon.

6. Resource Person - AI GAMES MEMORY GAMES - 23 MAY 2026 - 1 TO 3 PM
7. Resource Person on FDP - Organized by Community Health Nursing Department on **Smart teaching with AI : The future of Education** - 16-04-2026 - 2 to 3 PM ,COUNSIL HALL -SCON
8. Resource Person – Hands On AI Studio For Beginners – 16 MAY 2025
9. Resource Person – Build GenAI Apps with No-Code Tools – 01-Mar-2025 -1 P.M to 3 P.M
10. Organized Seminar – Bio inspired computing with Cheetah chase Algorithm's Application - Resource Person -Dr.M.Goudhaman -Head Internship Department /RIT- 01-Mar-2025 – 10A.M to 12 NOON ,SEC,Chennai
11. Organized Seminar – Agile and Scrum Fundamentals - Resource Person -Dr.K.Priyadarsini - Associate Professor,Data Science and Business System - 01-Mar-2025 – 8 A.M to 10 A.M ,SRMIST Kattankulathur,Chennai
12. Organized Seminar - VLSI -Untold Opportunities – Resource Person -Dr.S.Karthi -Associate Professor /SRMIST Vadapalani , 25-oct-2024 – 8A.M to 10 A.M ,SEC,Chennai
13. Organized Workshop – Hands-on workshop – Data Visualization Techniques in Data Science – Resource Person: Dr.K.Priyadarsini AP/SRMIST -Kattankulathur , 31-August -2024 – 8 A.M to 10 A.M – SEC ,Chennai
14. Resource Person - Workshop Title: Getting started with power BI service for improved decision making with AI ,31-August -2024 , 10 A.M to 12 NOON , SEC ,Chennai
15. Organized Workshop – Hands-on workshop on NVIDIA in Robotics -04-July -2024 -SEC
16. Organized Workshop – Hands-on workshop on NVIDIA in Healthcare - 19-June -2024 -SEC
17. Organized Workshop – Hands-on workshop for educators on AI opportunities using CO-PILOT – 28-Mar-2024 -SEC
18. Resource Person – Animation Games with SCRATCH – 28-Mar-2024 – SEC
19. Resource Person -Research Excellence with Projects -From concept to Publish -02-Mar-2024 - SEC
20. Resource Person – Ardunio Tinker CAD - 02-Mar-2024 – SEC
21. Organized Webinar Title: CYBERSECURITY -PRIORITY IN HEALTHCARE SECURITY ,09-October - 2023,10 A.M to 12 NOON. Resource Person: Mr.Dharani Kumar,Technical Lead , Cybersecurity Team,ICU Medical Venue: CSE-3F-OW-LH2,SEC,Chennai
22. Resource Person - Workshop Title: No Code only Scratch ,05-January-2023, 1 P.M to 3 P.M, Charles Babbage Lab, KCG, Chennai

PUBLISHED BOOK

Book Title: ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING FUNDAMENTALS
Edition: First 2023 ISBN: 978-93-5757-293-4 Publisher &Printer: Scientific International Publishing House - www.sipinternationalpublishers.com

AUTHORS:
1.Dr.K. MALATHI SARAVANAN
2.Mr. PUSHKARPRABHAT D, SAXENA
3.Dr. HARSH KHATTER
4.Mr. SYED AZAR ALI

CONFERENCES/SEMINARS/WORKSHOPS /FDP S ATTENDED:

1. Feather lite -7-10-2026 industrial visit - workshop
2. Malathi K., Hemavathy P., Karthick K., ...Ganesh S., Selvamuthu Kumaran V. Career Compass: An AI-Driven Skill-Aware Career Guidance Framework for Personalized Student Recommendations,Proceedings of 9th International Conference on Inventive Computation Technologies ICICT - 2026,
3. ExcelR - International Faculty Development Program (FDP) on Cloud Architect 18-11-2024 to 22-11-2024

4. online Seminar on Role of AI in IOT and Semiconductor Technologies, VPM 'S Maharshi Parshuram

College of Engineering ,23-09-2024

5. IFDP on GenAI and Prompt Engineering using Microsoft Co-Pilot, D.Y. Patil Agriculture and Technical University, Talsande (Maharashtra) BNM Institute of Technology Bangalore (BNMIT)(Karnataka) KIIT university, Bhubaneswar, (Odisha) Marwadi University, Rajkot (Gujarat) ,16 -09- 2024 to 20-09-2024
6. 8 Days FDP on Exploring trends and future directions in ML Integrated VLSI design –03-07-2024 to 10-07-2024 – SRM university, Ramapuram
7. Seminar on Unraveling the Real time Application of IOT with Deep Learning Models – 10-06-2024 to 14 -06-2024 - SRM Ramapuram University -Physical mode
8. Workshop on webinar Recruitment trends in Emerging Technologies-Future& Beyond – 15-05-2024 -ICT Academy
9. Workshop on Efficient Project Management &Documentation :Modern Tools Usage for Projects and Paper writing - 16-04-2024 - Science Hub & St.Xavier's College of Management & Technology,Patna,Bihar
10. 5 days FDP on Data Analytics using Power BI and Tableau 11-103-2024 to 15-03-2024 – EXCLER
11. 5 days FDP on DL and AI 26-02-2024 to 01-03-24 – APSSDC
12. 21 days FDP on Fundamentals of Full stack Development 09-01-2024 to 23-01-24 –EXCELR
13. 5 days FDP on Cyber Wise EDU 08-11-2024 to 12-01-24 – Sathyabama Institute of Science and Technology
14. 21 days FDP on Fundamentals of Full stack Development 09-01-2024 to 23-01-24 –EXCELR
15. 10 hours NFDP on ML &AI 13-11-2023 to 17-11-23 –EXCELR -APSSDC
16. 5 days FDP on AI Based Edge and Fog Computing 30-10-2023 to 3-11-23 – Sri Krishna college of Engineering and Technology
17. 21 days Master class on Deep Learning - Pantech e-Learning Private Limited 28-09-2023 to 18-10-2023
18. 21 days FDP on Data Science Tools -Department of CSE -SRMIST-Trichy – 12-7-2023 to 01-08-2023
19. 6 days FDP on Data Science Tools and Applications -Department of DS-BS -SRMIST-Kattankulathur – 17-7-2023 to 22-07-2023
20. 14 days of international FDP on Research tools -Department of AI-DS -EASWARI Engineering College 3-7-2023 to 14-7-2023
21. ICT Academy – 47th edition of Flagship Conference BRIDGE 2022– Industry-Institute Interaction Event with the Theme of Revitalizing India through Edu 5.0 -13 -JULY-2022
22. IIT Pals FDP on AI and ML - IIT ALUMNI INDUSTRY INTERACTION CENTER, at IITM Research Park , 28 November 2022
23. 5 days FDP on Innovative Research Prospects in Communication, Power systems and Machine Learning Techniques 17 th to 21st May 2021 –Jeppiaar Institute of Technology, Chennai
24. FEP -Faculty Enrichment Program on Artificial Intelligence, Machine Learning, Computer Vision
25. FDP on Machine Learning with Python –A Practical Introduction - 08 th to 12th Feb-2021 – SRM Institute of Science and Technology, Faculty of Engineering and Technology-Vadapalani, Chennai
26. 2 nd IEEE Winter School on Fog/Edge Computing 2020 - December 29 & 30 - 2020
27. Python Fundamentals: Series I Vaagdevi college of Engineering in association with Academics and Research- 17 -08-2020 to 22-08-2020
28. Computer Vision using Convolutional Neural Networks, Anurag university Blackbucks- 08-06-2020 to 10- 06-2020
29. FDP on Cloud Infrastructure and Virtualization 25th to 29th May 2020 - IARE-Hyderabad
30. FDP on Data Science Using Machine Learning Algorithm 26th may 2020- SVR Engineering College-Kurnool
31. FDP on Machine learning and Deep learning 27th to 31st May 2020-SRM Institute of Science and Technology-Kattankulathur
32. FDP on Machine Learning Algorithms, Applications &Advantages 25 th to 30 th May 2020Kamala Institute of Technology &Science-Telangana
33. FDP on Artificial Intelligence 22nd to 26 th May 2020 – Vignana Bharathi- Brain O Vision
34. FDP on Artificial Intelligence and Machine Learning 18 th to 22nd May 2020 – CMR Technical Campus –Hyderabad
35. FDP on Research Directives in Deep Learning 6 th 7 th March 2020 - IET Sponsored -Saveetha School of Engineering, Chennai

36. Workshop on Intellectual Property Rights – IPR 18 th and 19 th October2019- Tamilnadu state council for Science and Technology, Chennai; VISTAS
37. Latest measuring Equipment in E & C Agilent technologies, Chennai; M.A.M College of Engineering, Siruganur
38. Workshop on Digital library - KLN college of Engineering, Pottapalayam
39. Workshop on Finite Element Analysis in Electrical &Electronics Engineering- JJ college of Engineering &technology, Trichy

Webinars Attended:

1. Attended Technical webinar on Virtual Reality And Augmented Reality by Institution of Engineers, Coimbatore Local centre, Hindusthan college of Engineering and Technology on 15 -05-2023.
2. Attended Build a Thon - Smart Internz in collaboration with IBM global University Programs with a theme of Artificial Intelligence, from 20-07-2022 to 26-07-2022 at 6 p.m. to 9 p.m.
3. Attended Pals Technology Speaks Enterprise Digital Twin as a risk-free experimentation aid for Business and social systems on 25-08- 2022 ,1.30 - 3.30 pm
4. Webinar on Research Workflows, Research Metrics &Excellence in Academic Institutes Elsevier & AICTE ,12-05- 2020
5. Virtual Labs for Science and Engineering –A community Effort- Gandhi Institute for Education and Technology, Khurda , 13 -05- 2020
6. Data Engineering (Wega) – Mahacarya Foundation 13th & 14th May 2020
7. Tax Planning for Salaried Employees- SHASUN Jain College for Women –IQAC ,14 -05- 2020
8. Research methodology for Social Science - SHASUN Jain College for Women –IQAC ,15-05-2020
9. Impact Factor-Index and Google Scholar – PG & Research dept. – Ethiraj College -16 -05- 2020
10. Corporate Quiz –Dept. Of MBA, Dr.N.G. P Institute of Technology, Coimbatore- 11th to 17 th - May- 2020
11. Research methodology on EBSCO host (APS & BSE)-VISTAS ,19-05-2020
12. Data Analytics-Innovative Research methods and Data Analysis – VIMTW, Hyderabad – 23 -05-2020
13. Recent Trends in Computer Science (Quiz)- PG DEPT. of CS &Appli. - Government Arts College-Chidambaram 4th to 8th June 2020
14. Introduction to Angular-Gnanamani College of Technology, Namakkal-5 -06-2020
15. Introduction to Server-Side Programming- Gnanamani College of Technology, Namakkal-11 -06- 2020
16. Crypto currency And Black chain Technology-Vels Institute of Science Technology and Advanced Studies VISTAS, Pallavaram, Chennai - 18-06 -2020
17. Changing Cyber world around us-Vels Institute of Science Technology and Advanced Studies VISTAS, Pallavaram, Chennai 16-11-2020

PROFESSIONAL MEMBERSHIPS:

- Member in IAENG - ID 334330
- Member in SDIWC – ID 5668
- Member in IEEE - ID 99833105