Faculty Profile



Ms S. SELVANAYAKI, M.TECH.

Assistant Professor – AI&DS

HIGHLIGHTS:

- Number of Publications:29
- H-Index:5
- Project Funding Received:-
- Patents Published:11
- Patents Granted:

PROFESSIONAL LINKS:

- Scopus ID: 57192691350
- Scopus Link: https://www.scopus.com/authid/detail.uri?authorId=57192691350
- Google Scholar ID: https://scholar.google.com/citations?view_op=list_works&hl=id&user=Qb8jbf0AAAAJ
- Anna University Faculty ID: 2635991980
- AICTE Faculty ID: 405913685
- LinkedIn: https://www.linkedin.com/in/selvanayaki-s-59a78228a/

PROFESSIONAL BACKGROUND:

- Teaching Experience till date: 21

AREA OF SPECIALIZATION:

- Data Science
- Machine Learning
- Programming

PATENTS PUBLISHED:

INTERACTIVE PLATFORM FOR DISASTER RESPONSE TRAINING IN SCHOOLS ,2026

AN AI DRIVEN SMART AGRICULTURE MONITORING AND DECISION SUPPORT SYSTEM USING IOT, MACHINE LEARNING ,2026

AN AI DRIVEN SMART AGRICULTURE MANAGEMENT AND TRADE SYSTEM USING MACHINE LEARNING ,2026

SOIL MOISTURE SENSOR WITH IOT NOTIFICATION ,2026

ADAPTIVE VISION-BASED DRIVER VIGILANCE AND DROWSINESS DETECTION SYSTEM ,2026

CHARM-CARE, HEALTH & AI-BASED REGIMEN MANAGER (A PERSONALIZED DIET, NUTRITION & FITNESS RECOMMENDATION) ,2026

AN INTELLIGENT DIAGNOSTIC WEB PLATFORM FOR BREAST CANCER STAGE IDENTIFICATION,2026

PREDICTING HEALTH TRENDS USING QUANTUM-INSPIRED CLUSTERING FOR MEDICAL ANALYSIS , AUGUST 2025

INTELLIGENT SENTIMENT ANALYSIS AND PRODUCT RECOMMENDATION SYSTEM USING WEB SCRAPING , JANUARY 2025

MACHINE LEARNING-ENHANCED STROKE REHABILITATION SYSTEM USING A SMART ARM INTERFACE, March 2024

SYSTEM AND METHOD FOR EARLY DIAGNOSIS OF BREAST CANCER USING ARTIFICIAL INTELLIGENCE, December 2024

COURSES CERTIFIED:

- IBM Data Science Specialization – Coursera
- Introduction to Data Science Specialization – Coursera
- Applied Data Science Specialization - Coursera
- Programming, Data Structures And Algorithms Using Python –NPTEL
- Cloud computing – NPTEL
- Programming In Java – NPTEL
- Introduction To Internet Of Things – NPTEL
- Python For Data Science – NPTEL
- Big Data Computing – NPTEL
- Introduction to Machine Learning – NPTEL
- Foundation of Cloud IoT Edge ML – NPTEL
- Data Base Management System – NPTEL
- Data Structure and Algorithms using Java – NPTEL
- Google Cloud Computing Foundations –NPTEL
- Programming in Modern C++ - NPTEL
- Deep Learning & Neural Networks – Udemy
- Full Stack : React and Java Spring Boot – The Developer Guide – Udemy
- Neural Networks – Infosys Spring Board
- Networking Fundamentals – Infosys Spring Board
- Automated Software Testing – Infosys Spring Board

- Navigating Software Testing Tools: Types of Software Testing Tools – Infosys Spring Board
- Python – Infosys Spring Board
- Introduction to Machine Learning(IITKGP) , NPTEL
- Business Intelligence and Data Analytics - NPTEL
- Learning Analytics - NPTEL
- Data Analytics with Python - NPTEL
- Data Science for Engineers , NPTEL
- Advanced R Programming with Data Analytics in Business- NPTEL

ACHIEVEMENTS AND AWARDS: -

- **NPTEL Domain Scholar Certification in Programming – July – Dec 2024**
- **NPTEL DISCIPLINE STAR Certification - Jul-Dec 2024**
- **NPTEL SUPER STAR Certification for Topper in 4 Courses - Jul-Dec 2024**
- **NPTEL MOTIVATED LEARNER Certification – Jan – Apr 2024**
- **NPTEL DISCIPLINE STAR Certification - Jul-Dec 2023**
- **Top Topper in NPTEL Courses in** Cloud computing, Programming In Java, Big Data Computing Introduction to Machine Learning, Foundation of Cloud IoT Edge ML, Data Base Management System, Data Structure and Algorithms using Java, Google Cloud Computing Foundations, Programming in Modern C++, Learning Analytics, Introduction to Machine Learning (IITKGP) .

CONFERENCES/ SEMINARS/ WORKSHOPS ATTENDED:

- Modern Powered Agricultural Management and Trade System Using AI and IoT , PSG ITech , August 2026
- PediaDoseX: An Explainable Precision Intelligence Framework for Personalized Pediatric Drug Dosage Prediction for Sustainable Child Healthcare , PSG ITech , August 2026
- A Hybrid ResNet–MLP Framework for High-Sensitivity Pulmonary Nodule Detection with Grad-CAM-Assisted Visual Explainability for Sustainable Healthcare , , PSG ITech , August 2026
- A Real-Time Multi-Modal Smart Traffic Management System for Sustainable Ambulance Priority Using YOLOv5, MFCC–MLP, and IoT ,PSG ITech , August 2026
- RAG for Multi-Tool Integration and Smart Workflows ,SA Engineering College,2026
- EfficientNet-Based Deep Transfer Learning Model for Automated Melanoma Detection using Dermatoscopic Images ,2026
- Agri-SAR-ViT: SAR Image Colorization in Precision Agriculture in the 2026 International Conference on Natural Language Processing and Computer Vision,(ICNPCV) at Global Academy of Technology (GAT), Bengaluru,2026
- Dual-Lane: Bounded-Complexity Community Detection for Streaming Graphs Under Burst Churn ,2026
- Trail Parcel Tracking System: A Full-Stack Web Application for Logistics Management with Two-Agent Model and Pro-Rated Group Discounts
- Kyra NOVA:: A Multimedia Architecture for Age and Emotion-Adaptive Conversational AI,2026
- Cost-Effective IoT-Enabled Smart Agriculture Monitoring andForecasting System via RGB-to-Hyperspectral Conversion,2026

- Optimizing Pelvic Fracture Identification with U-Net and Hybrid Dice-Binary Cross Entropy Loss,2026
- A Multimodal Vision – Language Framework for FoodRecognition and Nutritional Assistance Using Large Language Models,2026
- AI-Powered Retail Product Classification and Time-SeriesDemand Forecasting for Smart Inventory Management,2026
- Thermal-Guided Knowledge Transfer for Vision Based Object Detection with Inference,2026
- A Multimodal Fusion of Explainable AI Pipeline Inte -grating Vision Transformer Classification and RFA for Survival Estimation,2026
- EndoScan-VLM: A Vision-Language Model For Multimodal Endometriosis Detection Using Medical Imaging And Clinical Symptom Data ,2026
- Identification of UAV in Military Applications Using Deep Learning, Malaviya National Institute of Technology Jaipur, July 2024.
- Vigil Net -: Advancing anomaly with Hybrid Supervised Learning Malaviya National Institute of Technology Jaipur, July 2024.
- Detecting Driver Fatigue with Python and OpenCV,10th International Conference on Communication and Signal Processing , April 2024
- Screen Recording and sharing over the cloud Platform for Remote Teams and Cross Functional Teams in the 2023 IEEE International Conference on Research Methodologies in Knowledge Management, Artificial Intelligence and Telecommunication Engineering
- R.M.K. Engineering College, Chennai, November 2023
- "Deep learning-based maize leaf disease diagnosis using IoT systems" at the 1st IEEE International Conference on Multidisciplinary Research in Technology and Management (MRTM 23), organized by New Horizon College of Engineering, Bengaluru, on 22nd–23rd September 2023.
- Deep Learning based Sentiment Analysis on Images at 2nd International Conference on edge computing and applications organized by Gnanamani College of Technology July 2023
- Crop Yield Prediction Using Spatio Temporal CNN and Multimodal Remote Sensing , at 2nd International Conference on edge computing and applications organized by Gnanamani College of Technology July 2023
- Tomato Leaf Disease Detection through Machine Learning based Parallel Convolutional Neural Networks, 7th International Conference on Intelligent Computing and Control Systems (ICICCS 2023) organized by Vaigai College of Engineering, Madurai, on
- May 17-19, 2023

PROFESSIONAL MEMBERSHIPS: -

Member In Soft Computing Research Society