# **Faculty Profile**



Dr. R. Selvakumar , M.E., Ph.D Associate Professor - AIML

#### **HIGHLIGHTS:**

- Number of Journal Publications: 4
- Patents Published: 10
- h-index: 1

#### **PROFESSIONAL LINKS:**

- Scopus ID: 59379971900
- Scopus Link: https://www.scopus.com/authid/detail.uri?authorId=59379971900
- Google Scholar ID: https://scholar.google.co.in/citations?user=R153YuYAAAAJ
- Anna University Faculty ID: 282967
- AICTE Faculty ID: 1-354-755673
- LinkedIn: https://in.linkedin.com/in/dr-r-selvakumar-361100299

#### **PROFESSIONAL BACKGROUND:**

- Teaching Experience till date: 18 Years
- Industrial Experience: Nil

#### **AREA OF SPECIALIZATION:**

- Web Development
- Wireless Sensor Networks
- Mobile Robotics
- Artificial Intelligence

#### PATENTS PUBLISHED/GRANTED:

- Dr.R.Selvakumar, Mr.Tenali Ravi Kumar, Ms. Anitha Potnuri, "AUTONOMOUS FLEET MANAGEMENT USING IOT AND MACHINE LEARNING", Indian Patent, December 2024
- Dr.R.Selvakumar, Mr.Tenali Ravi Kumar, Ms. Anitha Potnuri, "IOT BASED ENVIRONMENTAL HAZARD DETECTION SYSTEM WITH AI", Indian Patent, December 2024
- Dr.R.Selvakumar, Ms.S.Shanmugapriya, "AUTONOMOUS AGRICULTURAL ROBOT WITH AI FOR CROP MANAGEMENT", Indian Patent, August 2024

- Dr.R.Selvakumar, Ms.C.Silambarasi, ": IOT BASED REAL TIME HEART DISEASE PREDICTION USING MACHINE LEARNING TECHNIQUES", Indian Patent, August 2024
- C.Silambarasi, Dr.J.Anish Kumar, Dr.R.Selvakumar, J.Varalakshmi, K.S.Rekha, "AI-DRIVEN SMART WATER PURIFICATION SYSTEM USING MULTIPLE SENSORS FOR INTRUSION DETECTION IN WATER", Indian Patent, February 2024
- Dr.J.Anish Kumar, Dr.R.Selvakumar, J.Varalakshmi, K.S.Rekha, C.Silambarasi, "AI AND IOT BASED OPTIMIZED SOLAR-DRIVEN WATER PURIFICATION FOR TRIBAL PEOPLE", Indian Patent, February 2024
- Dr.R.Selvakumar, J.Varalakshmi, K.S.Rekha, C.Silambarasi, Dr.J.Anish Kumar, "AI & IOT-BASED WATER PURIFICATION SYSTEM MONITORING FOR REAL-TIME CONTAMINANT DETECTION", Indian Patent, February 2024
- J.Varalakshmi, K.S.Rekha, C.Silambarasi, Dr.J.Anish Kumar, Dr.R.Selvakumar, "AN IOT BASED REAL-TIME WATER QUALITY MONITORING & ALGAL BLOOM PREDICTION IN AQUACULTURE", Indian Patent, February 2024
- K.S.Rekha, C.Silambarasi, Dr.J.Anish Kumar, Dr.R.Selvakumar, J.Varalakshmi, "AN IOT BASED PREDICTIVE MATERIAL DAMAGE PREVENTION FOR ENHANCED EQUIPMENT RELIABILITY", Indian Patent, February 2024
- Dr.R.Selvakumar, J.Varalakshmi, K.S.Rekha, Dr.P.Vinayagam, C.Silambarasi, N.V.Ravindhar, "MODERNIZING AIR POLLUTION MONITORING SYSTEM USING IOT AND MACHINE LEARNING", Indian Patent, August 2023

### **COURSES CERTIFIED:**

- Coursera: Building Web Applications in Django
- Coursera: HTML, CSS, and Javascript for Web Developers
- Coursera: Interactivity with JavaScript
- Coursera: Learn Bootstrap
- NPTEL: Programming in C
- NPTEL: Problem Solving Through Programming In C
- NPTEL: Programming In C++

## ACHIEVEMENTS AND AWARDS:

• "Best Teacher of the Department" award for the Academic Year 2008-09 at V.M.K.V. Engineering College

## CONFERENCES/SEMINARS/WORKSHOPS ATTENDED:

- Workshop on "From Scratch to Deployment: Hands-on Model Building with Keras and TensorFlow", at Sri Venkateswara College of Engineering, 14-25 October 2024.
- FDP om "Exploring Artificial Intelligence: Trending Technologies", at DMI College of Engineering, 09-13 September 2024.
- "IoT-Embedded Smart Clothing with CNN for improved Spatial Awareness in the Visually Impaired", JCT College of Engineering and Technology, Coimbatore on 28-30th August 2024.
- "IoT-Enabled Exoskeletons for Fire Fighters using Reinforcement Learning for Adaptive Support in Emergency Situations", JCT College of Engineering and Technology, Coimbatore on 28-30th August 2024.

- FDP on "Internet of Things for Emerging Technical Applications", at M.P.N.M.Jaganathan Engineering College, 12-17 August 2024.
- Completed Virtusa Technology Orientation for Faculty (VTOF), May 2024
- "The Dark Side of AI: Malicious AI", Shri Shankarlal Sundarbai Shasun Jain College for Women, Chennai, 24th January 2024.
- "Ambot: Robot Assisted Ambulance for Emergency Medical Care", J.K.K.Nataraja College of Engineering and Technology, Kumarapalayam on 20, 21.Mar.2015.
- "Optimal Path Planning of Mobile Robots in Disaster Environments", VIT University, Vellore on 8, 9.Nov.2012.
- "Adhoc Mobile Robots Networking Scheme", Kathir College of Engineering, Coimbatore on 3, 4.Sep.2012.
- "End-to-End Packet Delay Minimization with Energy Efficient in Wireless Ad-hoc Networks", Mahendra Engineering College, Salem on 29-31.Mar.2012.
- "Home Agent Placement and Assignment in WLAN with Cellular Networks", Indian Institute of Science, Bangalore on 25.Feb.2010.

#### **PROFESSIONAL MEMBERSHIPS:**

 Member of Universal Association of Computer and Electronics Engineers (UACEE) -Membership ID: AM1002555