

# Faculty Profile



**Mrs.J.VARALAKSHMI, M.E.,**  
Assistant Professor(OG)/AIDS

## **HIGHLIGHTS:**

- Number of Journal Publications:3
- H-Index:-0
- Project Funding Received:=
- Patents Published:6
- Patents Granted:0

## **PROFESSIONAL LINKS:**

- Scopus ID: 0000-0002-4451-9408
- Scopus Link: <https://www.scopus.com/authid/detail.uri?authorId=58363351800>
- Google Scholar ID: ujQUrLMAAAAJ
- Anna University Faculty ID: 9213573
- AICTE Faculty ID:1-10708722661
- Anna University Supervisor ID: -
- LinkedIn: <https://www.linkedin.com/in/varalakshmi-j-8551402b2/>

## **PROFESSIONAL BACKGROUND:**

- Teaching Experience till date: 15 years
- Industrial Experience: 0

## **AREA OF SPECIALIZATION:**

- Cloud Computing
- Data Science
- Web Development

## **PATENTS PUBLISHED:**

1. **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**

2. 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
3. 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
4. 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
5. K.S.Rekha, C.Silambarasi, Dr.J.Anish Kumar, Dr.R.Selvakumar, J.Varalakshmi, “AN IOT BASED PREDICTIVE&NBSP;MATERIAL&NBSP;DAMAGE PREVENTION FOR ENHANCED EQUIPMENT RELIABILITY”, Indian Patent, February 2024
6. 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:**

- Completed NPTEL course on “Deep Learning” during Nov 2024.
- Completed MTA-International certification on “Introduction to Python Programming”
- Completed MTA- International Certification on “Security Fundamentals” during June 2021
- Completed MTC -International certification on “AZ500-Azure” during Jan 2021
- Completed NPTEL course on “Introduction to Machine Learning” during May 2020

#### **ACHIEVEMENTS AND AWARDS:**

- “Best Mentor Award” in Latha Mathavan Engineering College during 2014.
- “Best Discipline Award” in K.L.N.College of Information Technology during 2006.
- Factshala Trainer-at National Level
- Received a project fund of Rs.37,000 through Factshala and Shyamalavani FM Radio at SLCS.

#### **CONFERENCES/SEMINARS/WORKSHOPS ATTENDED:**

##### **Journals Published:**

- A dual hashing-based authentication and secure data transmission scheme for vehicular cloud environment using MECC with optimal resource allocation mechanism,[Varalakshmi, J,](#) [Dhanasekaran, S,](#)Soft ComputingThis link is disabled., 2024, 28(17-18), pp. 10423–10437
- Application of Latest Authentication Technologies in Vehicular Cloud,[Varalakshmi, J,](#) [Dhanasekaran, S,](#)2023 International Conference on Computer Communication and Informatics, ICCCI 2023, 2023
- “Secure Data Sharing Scheme for Vehicular Cloud Networks Using an Optimized RSA Algorithm” ,Varalakshmi J,S.Dhanasekaran, International Journal of Intelligent Systems and Applications in Engineering, March 2024, 12(3), 3566–3574

### **National Conferences:**

- Presented a paper on “A Simple Security Model based on Multi-cloud Services for Data privacy in Vehicular Networks” in National Conference on Emerging Trends in Engineering 2021 at Cambridge Institute of Technology, Bangalore held on 08.07.2021 & 09.07.2021.
- Presented a paper on “An Efficient Mutual Authentication Protocol for preserving the Data privacy for vehicular Networks in Multi-Cloud” in Virtual international Conference of Innovation in Interdisciplinary Research 2020 conducted by KARE held on 23.6.2020

### **International Conferences:**

- Presented a paper on “Latest authentication technologies in Vehicular Cloud” in an International Conference on ICCCI’23 organized by Shri Shakthi College of Engineering and Technology, Coimbatore and published in IEEE and also scopus Indexed on July, 2023.

### **FDPs/Seminar/Workshops Attended:**

- FDP on “Machine Learning” organised by St. Joseph College of Engineering from 24.06.2024 to 28.06.2024.
- 5 days Faculty development Program on “Computational Tools on Engineering And Research: Issues and Challenges” organized by Techno Engineering College Banipur from 18.11.2024 to 22.11.2024.
- ATAL FDP on “Integrating Machine Learning and Deep Learning in Real-time IoT Systems (in Association with NVIDIA)” organized by Saveetha Engineering College from 2.12.2024 to 7.12.2024
- ATAL FDP on “Responsible AI” organized by PSG College of Technology from 9.12.2024 to 14.12.2024
- ATAL FDP on “Generative AI and It's Applications with Computer Vision” organized by Lalbhai Dalpatbhai College of Engineering Ahmedabad from 16.12.2024 to 21.12.2024
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- Five days National level FDP on “Ethical hacking Tools and Techniques” organized by Kamaraj College of Engineering and Technology from 28.08.2023 to 01.09.2023.
- Nine days National level workshop on Devops organized by SRM Institute of Science and Technology from 16.06.2023 to 24.06.2023.
- A Webinar on “Realtime applications of Machine learning and Deep learning models in E-Commerce” organized by RVM Centre for Business Analytics in Association with Boston ITSolutions India Pvt.Ltd on 28.04.2023.
- Completed online course on “Azure Fundamentals” provided by skillUP, Simplilearn
- 5 Days online international FDP on “Current Trends in Information Technology” conducted by MEASI Institute of Institute of Technology from 26.9.2-22 to 30.9.2022.

- Completed online course on “Introduction to Data Analytics” provided by Simplilearn.
- Faculty Training program on “Big Data Analytics” provided by veranda & Edureka on 26.10.2022
- Two weeks International faculty development program on “Data Science Tools” conducted by Easwari engineering college from 07.10.2022 to 20.10.2022.
- Six days Faculty Development Training programme on “Web Technology” conducted by K.L.N college of engineering from 11.07.2022 to 16.07.2022.
- One week virtual FDP on “Advanced machine learning algorithms for real time applications using R and python” from 01.08.2022 to 06.08.2022.
- National Webinar on “Cloud storage and its Applications” dated 03.06.2021 by Ayya Nadar Janaki Ammal College.
- International Webinar on Computer Vision for Self Driving Cars” dated 29.05.2021 by Wollo University,Ethiopia
- Webinar on “Cloud computing” dated 13.07.2021 at SLCS
- Webinar on “Cryptography and Network Security using Java” dated 25.08.2021 at SLCS
- FDP on CYBER SECURITY organized by Vels Institute of Science, Technology and Advanced Studies in association with Indian Servers on 20.04.2020
- FDP on Cyber Forensics organized by Kalasalingam Academy of Research and Education Studies in association with Indian Servers on 18.04.2020
- Tech-Talk on Edge Computing organized by Kalasalingam Academy of Research and Education on 9.05.2020
- Tech-Talk: Conventional ECM and cloud based ECM infrastructure organized by Kalasalingam Academy of Research and Education on
- Online training of the“IEEE Xplore Digital Library organized by Kalasalingam Academy of Research and Education on 14.05.2020
- Tech-Talk: Evolution of cloud computing organized by Kalasalingam Academy of Research and Education on 20.05.2020
- One week online FDP on “Recent Trends in Information Technology” organized by Kalasalingam Academy of Research and Education from 18.4.2020 to 24.04.2020
- Online FDP on “Machine Learning-The Next Generation Aspects” organized by Dr.SNS college of Arts and Science College,Coimbatore on 4.06.2020
- Three Days International Workshop on Real Time Cognitive Services on Azure Cloud organized by Parvathy’s arts & Science College,Dindigul from 10.6.2020 to 12.6.2020
- A State Level workshop on “Entrepreneurship Opportunities in IOT” organized by Mannar Thirumalai Naicker College,Madurai on 13.02.2020
- One day FDP on “NAAC Re-Accreditation Process” organized by Subbalakshmi Lakshmiopathy College of Science on 28.12.2019.

- One day FDP on “Digital Marketing” organized by Synergy, Madurai on 20.09.2019
- Three days workshop on “cloud computing” organized by Microsoft Innovation Center and Latha Mathavan Engineering College from 25.11.2014 to 27.11.2014.
- Five days FDP on “C# and ADO .Net programming” conducted by ICT Academy of Tamilnadu at Latha Mathavan Engineering College from 10.11.2014 to 14.11.2014
- Two days FDP on “Open Source Lab” organized by Latha Mathavan Engineering College on 20.09.2013 & 21.09.2013.
- Five days FDP on “Data Structures and Algorithms” organized by Kalasalingam University from 25.06.2012 to 29.06.2012.
- One day workshop on “MALAB Programming” organized by Kalasalingam University on 23.03.2012.
- National Level Seminar on “Knowledge Engineering and Knowledge based systems” organized by Kalasalingam University on 17.02.2012.
- Presented a paper on “Adaptive File Replication and consistency maintenance in P2P Systems” by National Conference of Sri Krishna College of Engineering and Technology,Coimbatore on 16.02.2012 & 17.02.2012.
- One day workshop on “Wireless sensor Network Simulator using Qualnet” organized by Kalasalingam University on 31.01.2012.
- National Level Workshop on “Phishing and Spyware” organized by Kalasalingam University on 25.01.2012.
- Workshop on “Signal Processing” organized by Kalasalingam University on 17.06.2011.
- Three days training program on “Skill Edge-Data Structures using C” organized by ICT Academy of Tamilnadu and Vickram College of Engineering on 12.06.2011.
- One day workshop on “Web development” organized by Kalasalingam University on 05.02.2011.
- Presented a paper on “Optimized Greedy Anti-void routing Wireless Sensor Networks” organized by K.L.N.College of Information Technology on 04.02.2010 & 05.02.2010.
- Two days workshop on “IBM CE” organized by IBM and Sethu Institute of Technology on 24<sup>th</sup> and 25<sup>th</sup> February, 2009.

#### **PROFESSIONAL MEMBERSHIPS:**

- ISTE MEMBER