Dr.S.Kavitha B.Tech.,M.E.,Ph.D
Assistant Professor/CSE
Velammal College of Engineering and Technology, Madurai
e-Mail Id: skt@vcet.ac.in
Scopus Id: 57213440892
Google Scholar Id: gnzmmXMAAAAJ

Working Experience

Working as an **Assistant Professor** in the **Department of CSE -Velammal College of Engineering and Technology, Madurai** from June 2012 to Till Date

Scopus Publication

Number of Scopus Publication: **18**

Academic chronicle

COURSE	NAME OF THE INSTITUTION	BOARD/ UNIVERSITY	YEAR OF STUDY
Ph.D Information and Communication Engineering	PSNA College of Engineering and Technology,Dindigul	Anna University (Chennai)	2024
M.E-CSE	Raja College of Engineering & Technology, Madurai	Anna University (Chennai)	2012
B.TECH-IT	M.Kumarasamy College of Engineering, Kaur.	Anna University (Chennai)	2010
HSC	Velammal Matriculation Higher Secondary School, Thiruppuvanam	State Board	2006
SSLC	Velammal Matriculation Higher Secondary School, Thiruppuvanam	Matriculation	2004

Title of Ph.D Thesis

- Intelligent Intrusion Detection System using Machine Learning and Deep Learning Model in Adverse Environment

Book Published

- **(SCOPUS)** IGI Book chapter on **Current trends in integrating the blockchain with cloud-based internet of things,**Research Anthology on Convergence of Blockchain, Internet of Things, and Security,pp. 247-257,2022

- **(SCOPUS)** IGI Book chapter on **Best practices: Adopting security into the cloud-based internet of things,** Challenges and Opportunities for the Convergence of IoT, Big Data, and Cloud Computing,pp. 90-103,2021

- **(SCOPUS)** IGI Book chapter on **Current Trends in Integrating the Internet of Things Into Software Engineering Practices** in Research Anthology on Artificial Intelligence Applications in Security,1-4, pp. 413-428,2020

- **IGI Book chapter** on **Best Practices: Adopting Security Into the Software Development Process for IoT Applications** in in Integrating the Internet of Things Into Software Engineering Practices, pp. 146-159,2019

- **IGI Book chapter** on **Current Trends in Integrating the Internet of Things Into Software Engineering Practices** in Integrating the Internet of Things Into Software Engineering Practices, pp. 14-35,2019

- Published a book Titled " **Geographic Information System**" in 2019 by **Technical Publication**

- Published a book Titled "**Operating System Internals**" in January 2018 by **Jeyalakshmi Publication**

Patent Published

- Smart IOT System For Slope Disaster Detection and Early Warning. Application Number-202441062340, Publication Date-**23/08/2024**

- Early Detection of Kidney Failure By Using KNN And SVM. Application Number 202341058294, Publication Date- **08/09/2023**

- Artificial Intelligence Based Early Bacterial Detection in Bloodstream Infection using Deep Transfer Learning Algorithm. Application Number: 202331014002, Publication Date-**10/03/2023**

- IoT Based AC Remote Controller using Google Assistant. Application number-202241009449, Publication Date- **04/03/2022**

NPTEL Certification

- Introduction to Operating Systems- Jul-Sep 2024

- Teaching And Learning In General Programs: Talg- Jul-Aug 2023

- Demystifying Networking- Jul-Aug 2022

- Software Testing- Jan-Feb 2022

- Nptel Certification on Cloud Computing-Aug-Oct2017

Project Proposal Submitted

- Submitted project proposal Titled "Advanced Rehabilitation Glove for Muscle Stiffness Management: An Innovative Smart Hand Therapy Solution", Indian Council Of Social Science Research as Co-Investigator in 2024

- Submitted project proposal Titled "Hand Spasticity Extender" to Tamilnadu CM Proposal Grant as Co-Investigator

- Submitted project proposal Titled "Lone Love" worth of 10 Lakhs under MSME in 2022Submitted project proposal Titled "Analytics Based Smart Device To Monitor The Healthcare Of Neonates" under BIG Scheme in BIRAC worth of 35.68 Lakhs as Co-Investigator

Journal Reviewer

S.No	Name of the Journal	Title of the paper reviewed	Date
1.	International Journal of Sociotechnology and Knowledge Development (IJSKD). IGI Global peer review process	Mitigation of Black hole attack in a IoT network using Trust based Reinforcement Learning	4/2/2022
2.	International Journal of Sociotechnology and Knowledge Development (IJSKD). IGI Global peer review process	Cuckoo Search Augmented Mapreduce for Predictive Scheduling with Big Stream Data	2/21/2021
3.	International Journal of Sociotechnology and Knowledge Development (IJSKD). IGI Global peer review process	Xenobots – A remarkable combination of Artificial Intelligence based biological living robot	4/7/2021
4.	International Journal of Service Science, Management, Engineering, and Technology (IJSSMET) IGI Global peer review process	Factors Influencing the Residential Land Use Right Mortgage in Yen My District, Hung Yen Province, Vietnam	4/7/2021
5.	International Journal of Sociotechnology and Knowledge Development (IJSKD). IGI Global peer review process	Xenobots: A Remarkable Combination of an Artificial Intelligence-Based Biological Living Robot	4/7/2021
6.	International Journal of Service Science, Management, Engineering, and Technology (IJSSMET) IGI Global peer review process	Ensemble Feature Selection for the Recognition of Human Activities and Postural transitions on Smartphone	4/15/2020
7.	International Journal of Sociotechnology and Knowledge Development (IJSKD). IGI Global peer review process	Discriminate Supervised Weighted Scheme for the classification of Time series signals	4/10/2020
8.	International Journal of Sociotechnology and Knowledge Development (IJSKD). IGI Global peer review process	Statistical Assessment of Ambient Assistive Techniques by Elders to enhance their well being from Fall Events	1/10/2020

Courses / Certificates Done

- Completed a Solo learn certificate on Python 3 Tutorial course

- Completed a IITBX certificate on ET701x: Elements of Learner-Centric MOOCs

- Completed a IITB certificate on Latex

- Moodle Test for Teachers conducted by IIT Bombay

- GUVI Certification on Python

International Journal

- **(SCI)** Published a paper "**Intelligent Intrusion Detection System using Enhanced Arithmetic Optimization Algorithm with Deep Learning Model**" in Tehnicki Vjesnik,**in2023**

- **(SCOPUS)** Published a paper "**Factors influencing the use of Deep Learning for Medicinal Plants Recognition**" in Journal of Physics: Conference Series-IOP Publishing in **2021**

- **(SCOPUS)** Published a book "**Best practices: Adopting security into the cloud-based internet of things**" in IGI Global Publishing in **2021**

- **(WOS)** Published a paper **"Network Anomaly Detection for NSL-KDD Dataset Using Deep Learning" in** Information Technology in Industry in **2021**

- **(SCOPUS)** Published a paper **"An Intrusion Detection System- Techniques and Algorithms of Machine and Deep Learning" in** International Journal of Innovative Technology and Exploring Engineering in **2020**

- **(SCOPUS)** Published a paper "**Personal health records as a social network encrypted using attribute based encryption**" in International Journal of Applied Engineering Research in 2015

- Published a paper"**Detecting Network Intrusion based on Machine Learning Algorithms**" in International Journal of P2P Network Trends and Technology in 2020.

- **TRANSACTION OF HEALTHCARE RECORDS USING BLOCKCHAIN-**International Research Journal of Engineering and Technology (IRJET) in 2019

- Published a paper" **Security Using Colors And Armstrong Numbers**" in International Journal of Creative Research Thoughts (IJCRT), 2018

- Published a paper" **Pharmaceutical Field Sales Performance Using Business Intelligence**" in International Journal of Creative Research Thoughts (IJCRT), 2018

- Published a paper" **Market Analysis and Seller Trust Mining Based on MDTE Model**" in **"**International Journal of Research in Advanced Technology in 2016

- Published a paper" **Medical Image and Information Retrieval Based on Multiple Features of an Image"** in "International Journal of Advanced and Innovative Research" in 2015

- Published a paper "**Hand Gesture recognition-analysis of various techniques, methods and their algorithms"** in "International journal of innovative research in Science, Engineering and Technology", 2014

International Conference

- **(SCOPUS)** "Unveiling Fake News with Machine Learning and Natural Language Processing Techniques", 2nd International Conference on Emerging Trends in Information Technology and Engineering, ic-ETITE 2024

- **(SCOPUS)** "NexGen AgriCare' Advancing Crop Resilience via Real- Time Disease Detection and IoT- Driven results for Banana crop", 2nd International Conference on Emerging Trends in Information Technology and Engineering, ic-ETITE 2024

- **(SCOPUS)** "Predictive Health Assistant: AI-Driven Disease Projection Tool", 11th International Conference on Reliability, Infocom Technologies and Optimization (Trends and Future Directions), ICRITO 2024

- **(SCOPUS)** "Garden Irrigation System Using IOT",11th International Conference on Reliability, Infocom Technologies and Optimization (Trends and Future Directions), ICRITO 2024

- **(SCOPUS)** "IoT-Based Smart Kitchen with Enhanced and Automated Safety Measures",11th International Conference on Reliability, Infocom Technologies and Optimization (Trends and Future Directions), ICRITO 2024

- **(SCOPUS)** "Model-based Controller Design for Automatic Two Wheeled Self Balancing Robot",6th International Conference on Inventive Computation Technologies, ICICT 2023

- **(SCOPUS)** "Human Safety and Vehicle Speed Controlling using Internet of Things (IoT)",2nd International Conference on Edge Computing and Applications, ICECAA 2023

- **(SCOPUS)** "Smart Driving Alert System Using MT CNN",IFIP Advances in Information and Communication Technology, 2023

- **(SCOPUS)** "Research on Piano Music Recommendation Algorithm Based on Time-Frequency Information",2nd International Conference on Smart Technologies for Smart Nation, SmartTechCon 2023

- **(SCOPUS)** "Smart Language Checker: A Machine Learning Solution for Offensive Language detection in Social Media**",**International Conference on Data Science, Agents and Artificial Intelligence, ICDSAAI 2023

- **"**Efficient Parallel And Distributed Mining Of Cbir By User Nprf" conducted by Maria College of Engineering and Technology, Kanyakumari.(EMICS 12)

- "Data Extraction Using Gaussian Distribution Based Tree Algorithm" conducted by K.L.N. College of Information Technology, Madurai(Dec 2012)

- "Wireless Sensor Networks with High Energy and maximized Lifetime" conducted by E.G.S Pillay Engineering college, Nagapatinam (ICRDPETPET 2013)

- "Survey on various Hand Gesture Recognition -collection techniques, methods and their algorithms" conducted by K.L.N. College of Information Technology, Madurai.(ICDASDC 2013)

- "An overview on various data collection methods and segmentation algorithm for hand gesture recognition" Conducted by NPR College of Engineering and Technology,Madurai(ICAETM'14)

- "Hand Gesture recognition-Analysis of various techniques , methods and their algorithms" conducted by K.L.N College of Engineering,Madurai(ICIET'14)

- "Medical Image and Information Retrieval Based On Multiple Features of an Image" conducted by K.L.N. College of Information Technology, Madurai.(ICDASDC 2014)

- "Enhancing Multilevel Trust and Security Using Data

Mining Techniques" conducted by K.L.N. College of Information Technology, Madurai.(ICDASDC 2014)

- "Personal Health Records As a Social Network Encrypted Using Attribute Based Encryption" conducted by Syed Ammal Engineering College, Ramanathapuram

- "Security Using Colors And Armstrong Numbers" conducted by Sethu Institute of technology(ICCI" 2018), ISBN : 978-93-87871-18-2

- "Pharmaceutical Field Sales Analysis Using Business Intelligence" conducted by Pandian Saraswathi Yadav Engineering College, Arasanoor ,[ICETET'18]

National Conference

- **"Efficient Parallel And Distributed Mining Of Cbir By User Navigation pattern"** conducted by Sri vidya college of Eng and Tech.,Virudhunagar.(ETCET 12)

- **"Security Analysis in Enterprise Network Using policy"** conducted by CAPE institute of Technology, Levengipuram

- **"Market Analysis and Seller Trust Mining Based on MDTE Model"** conducted by P.S.R. Engineering College, Sivakasi. (ReCant-2016)

Programmes (Conference/FDP/Seminar/Workshop) Attended

Sl .No.	Title of the Programme	Sponsor / Organizer with Place	Date (Duration in No. of Days)
1.	FDP on Teaching and Learning in General Programs: TALG	NPTEL-AICTE	Jul-Aug 2023(4 Weeks)
2.	FDP on Demystifying Networking	NPTEL-AICTE	Jul-Aug 2022(4 Weeks)
3.	FDP on "Amazon Web Services" in collaboration with Brainovision Solutions India Pvt.Ltd & All India Council For Technical Education - AICTE	PSNA College of Engineering and Technology, Dindugul	22.08.22 - 27.08.22(6)
4.	FDP on Software Testing	NPTEL-AICTE	Jan-Feb 2022(4 weeks)
5.	AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Applications of Blockchain Technology and AI in Services Sector"	Acharya Bangalore B School.	20.09.2021-24.09.2021 (5)
6.	AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Blockchain Technology & Its Applications"	Malviya National Institute Of Technology, Jaipur.	06.09.2021-10.09.2021 (5)
7.	Data Science using Python	Kongu Engineering College	20.5.2020-24.5.2020(5)
8.	AICTE Sponsored FDP on Fundamentals of Machine Learning ,Deep Learning, and their Applications in Cyber Security	PSNA College of Engineering and Technology, Dindugul	14.11.2019-28.11.2019(14)
9.	AICTE-ISTE Induction program	AICTE-ISTE sponsored one	18.12.2018-

	on Cloud Computing and Big Data Analytics-Challenges and Solutions	week FDP at Velammal College of Engineering and Technology	15.12.2018(7)
10.	FDP on "Big data analytics with state of art experimentation on e-governance,healthcare and educational system",	AICTE sponsored one week FDP at K.L.N college of Information Technology, Madurai	5.10.2017-11.10.2017(7)
11.	FDP on "Data Analytics"	PSNA College of Engineering and Technology, Dindugul	19.06.2017-25.06.2017(7)
12.	Hands-on workshop on Python programming	Centre for Academic courses and Centre for faculty development, Anna university, Chennai at VCET,Madurai	18.08.2017-19.8.2017(2)
13.	FDP on Theory of Computation	FDP at K.L.N college of Information Technology, Madurai	6.6.2016- 12.6.2016 (6)
14.	Workshop on Bigdata	Cape Institute of Technology	23.3.2015
15.	FDP on Principles of compiler design	FDP at A.C. College of Engg & Tech, Karaikudi	4.12.13-10.12.13 (7)
16.	Writing and speaking skills	Workshop- Department of English at Velammal College of Engg & Tech, Madurai.	7.12.2012-8.12.2012 (2)
17.	Application Development Using ANDROID	Workshop- Pantech Solutions in Velammal College of Engg &Tech, Madurai	16.8.2012-17.8.2012 (2)
18.	Principles of compiler design	FDP- A.C. College of Engg & Tech, Karaikudi	4.12.2013-10.12.2013 (7)
19.	Middleware Technologies	FDP-K.L.N. College of Engineering	29.06.2012 (1)
20.	Current Trends in Network Security-NSCTNS'12	Seminar-AICTE-Vickram College of Engineering, Madurai	3.2.2012-4.2.2012 (2)

Programmes (Conference/Seminar/Workshop/FDP) Organized

Sl. No.	Title of the Programme	Sponsor / Venue Where Organized	Date (Duration in No. of Days)
1	Two Day National Level Hands-On Workshop on "Predictive Analytics for Real Time Sensor Data"	Velammal College of Engineering and Technology(Dept of CSE)	23.02.2018 and 24.02.2018(2)
2	Resource person in Staff Training Programme on Computer Literacy for Managers/Chief Managers of Indian Overseas Bank	IOB Main branch,Anna nagar,Madurai- As a consultancy work at Staff training Center,Madurai	25.06.2012-28.06.2012(4)

Professional Memberships

1.	International Computer Science and Engineering Society(ICSES) #1133
2.	International Economics Development Research Center (IEDRC): # 90081139
3.	International Association of Engineers (IAENG): #209939.
4.	International Society for Research and Development (ISRD) :# M4150905170

Kavitha S

Assistant Professor in Department of
Computer Science and engineering
Network Security

	All	Since 2020
Citations	81	62
h-index	5	5
i10-index	3	2

TITLE	CITED BY	YEAR
Hand Gesture recognition-analysis of various techniques, methods and their algorithms SK R.Pradipa International journal of innovative research in Science, Engineering and …	27	2014
Network anomaly detection for NSL-KDD dataset using deep learning S Kavitha, N Uma Maheswari Information Technology in Industry 9 (2), 821-827	21	2021
Intelligent intrusion detection system using enhanced arithmetic optimization algorithm with deep learning model S Kavitha, N Uma Maheswari, R Venkatesh Tehnički vjesnik 30 (4), 1217-1224	13	2023
Factors influencing the use of deep learning for medicinal plants recognition JV Anchitaalagammai, JSSL Revathy, S Kavitha, S Murali Journal of Physics: Conference Series 2089 (1), 012055	9	2021
Model-based Controller Design for Automatic Two Wheeled Self Balancing Robot VM Senthilkumar, MS Ramkumar, P Velrajkumar, T Kamalavalli, … 2023 International Conference on Inventive Computation Technologies (ICICT …	5	2023
IoT-Based Smart Kitchen with Enhanced and Automated Safety Measures S Murali, JV Anchitaalagammai, S Kavitha, CJ Sugirtha, B Iraimalar	2	2024