Name of Faculty (Ph.D): Dr.Vijayalaxmi Kadrolli
Designation: Associate Professor

Email: vijayalaxmikadroli@ternaengg.ac.in

Address for Correspondence:

 JN-3/12/13

 Bharat CHS

 Sector-10, Vashi-400703

Professional Qualification:

  ➢ **Ph.D in** Ph.D (Computer and Information Sciences)**, 2021**
          P.D.A College of Engg, VGTU, Belgavi, Karnataka
  ➢ **Master of Technolog (Computer Science and Engineering),2004**
          P.D.A College of Engg, VGTU, Belgavi, Karnataka
  ➢ **Bachelor of Engineering(E and I), 1999**
          P.D.A College of Engineering, Gulbarga University, Karnataka

Short Biodata:

I am working as Associate Professor in Information Technology Department, completed Ph.D in Compute and Information Science from Computer Science and Engineering Department at Poojya Doddappa Appa (PDA) College of Engineering, Kalaburagi, Karnataka, India, an autonomous institute affiliated to Visvesvaraya Technological University (VTU), Belagavi, Karnataka, India. I obtained M.Tech. in Computer Science and Engineering from the P.D.A. College of Engineering, VTU, in 2004. The main research areas are in wireless sensor networks, artificial intelligence, Machine Learning, AR -VR, soft computing, Image Processing.

Patents/ Products/ Consultancy:

Patents:

SR No	Paper Tile	Patent/International conference/Journal	Communicated /Year of Publication
01	Method and System for utilizing machine learning models(ML) for determining	Published: Patent with no 202141045152	2021

	optimal travel routes for electric vehicles (EV)		
2	A system to monitor pigeon-pea agriculture along with Helicoverpa Armigera pest control using WSN assembly",	Published: Patent with no 201941033341	2019

Reviewer:

1. International Conference (EQUNIOX-2021)
2. International Conference (IEEE - ICAST – 2022)
3. International Journal of Communication Systems

Major Subjects:

 ➢ Machine Learning, AI, AR-VR, WSN, Soft computing, Image Processing

Citation Analysis:

33citations (h-index 2 and i10-1) in google scholar
Google scholar link:
https://scholar.google.co.in/citations?user=xwK1fagAAAAJ&hl=en

List of Publication:

Ph.D Papers :			
1	ficient bandwidth aware routing protocol in wireless sensor networks communicated	International Journal of Communication Systems	Springer Journal--2021
2	Fuzzy Based Multi-Level Multi-Constraint Multi-Path Reliable Routing in Wireless Sensor Network.	**Springer Journal-** International Journal of Information Technology	2020
3	Multi-Level Multi-Constraint Multi-Priority Fuzzy Sensor Routing (M3 L-C-PFSR)	International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-8 Issue-9, July 2019	2019/6
4	Fuzzy Clustering with Multi-Constraint QoS Service Routing in Wireless Sensor Networks	Journal of Telecommunication and Information Technology(JTIT)	2019/1
	Decision Support Based	International Journal of Recent Technology	2019/5

5	Dry-Land Irrigation Using Fuzzy Routing Protocol in WSN (DDI-FRP)	and Engineering (IJRTE) ISSN: 2277-3878, Volume-8, Issue-1, May 2019	
6	QoS Management of WSN by Fuzzy Logic	Springer ICACIE 2017, Innovations in Computer Science and Engineering ,pp 419-426, Springer Nature Switzerland(book chapter)	2019(Springer Book Article)
8	Performance Comparison of Classical and Fuzzy Based Routing Protocols in WSN.	Proceedings in IEEE 2016 International Conference on Wireless Communications, Signal Processing and Networking (2016),	March 23-25, 2016,
9	Fuzzy logic-based cluster routing techniques in WSN	IJCTA	2016
10	Soft computing routing techniques in Wireless Sensor Network	2016 2nd International Conference on Advances in Electrical, Electronics, Information, Communication and Bio-Informatics (AEEICB)—(IEEE-Xplore)	2016/2/27
11	Traffic Anomaly Timely Detection by WSN Using Fuzzy Logic-MDP", International Journal of Information Technology.	Springer Journal. Communicated.	communicated
12	Intrusion detection using fuzzy logic with timely access through wireless sensor networks.	TJCA International Journal of Computers and Applications. Communicated	communicated

Springer Book Chapters:

13	Comparative Analysis Grey Wolf Optimization Technique & Its Diverse Applications in E-Commerce Market Prediction	Machine Learning and Big Data Analytics (ICMLBDA) 2021). ICMLBDA 2021. Lecture Notes inNetworks and Systems, vol 256. Springer, Cham. https://doi.org/10.1007/978-3-030-82469-3_15. International Conference on Machine Learning and Big Data Analytics (ICMLBDA) 2021—IIT Patna	Springer ,AISC series 2021

			2022-Published
14	Grey Wolf Optimization Technique for Predictive Analysis of Products in E-Commerce – An Adaptive Approach	ICSMDI 2022-Springer Book Chapter	

IEEE Xplorer:

15	Portable Weather Station Using GUI	2019 3rd International Conference on Computing Methodologies and Communication (ICCMC)	29 August 2019
16	Panda: Public auditing for shared data with efficient user revocation in the cloud	Online International Conference on Green Engineering and Technologies (IC-GET)(IEEE-2016)	2017/05/4

International Journals:

17	ANDROID APPLICATION FOR CAB BOOKING – BOOKIT	International Journal of Advanced Research in Computer and Communication Engineering. Vol. 11, Issue 9. ISSN (O) 2278-1021, ISSN (P) 2319-5940	September 2022
18	Emerging Competent Artificial Intelligence Approaches for Prediction of Crops	Turkish Online Journal of Qualitative Inquiry (TOJQI) Volume 12, Issue 6, July, 2021: 9812 – 9824	2021
19	Early Predictive Crop Model for Indian Dry Land Agriculture	High Technology Letters	2021
20	Implementation of Blockchain-Based Decentralized Application for collecting insights into smart cities, Test engineering and management	Test Engineering and Management (TEST), ISSN:0193-4120, Volume 83,	May-June2020.
21	Intruder Tracking System Using Wireless Sensor Network, Test	Test engineering and management (TEST), ISSN: 0193-4120, Volume 83, Issue: May-June 2020	May-June2020.
22	Performance comparison on modulation techniques with novel MEC for nano scale wireless communications	Journal of Innovation in computer Science and Engineering	2017/07
23	Online Voting System	IOSR Journal of Computer Engineering	2016/3

	(Android Application)	(IOSR-JCE)	
24	Banking Expert system With Credit Card Fraud Detection using HMM algorithm	International Journal of Engg and computer science	2015/12
25	<u>Survey on credit card fraud detection techniques</u>	International Journal Of Engineering And Computer Science	2015/11
26	A Novel Approach for Plant Species Recognition Using Mobile Phone	International Journal of Research in Advent Technology (IJRAT)	2015/8
27	Optimized Distributed Association Mining (ODAM) Algorithm for detecting Web Robots	International Journal Of Engineering And Computer Science (IJECS)	2015/7
28	An Approach to Improve The Throughput Of ZigBee Cluster Tree Network	Internationals Journal of Advanced Research in Computer Science and Software Engineering **(IJARCSSE)**	2015/3
29	Plant Species Identification using Leaf Image and Classification Methods	International Journal Of Advance Research In Science And Engineering, (IJARSE)	2015/2
30	Music Recommendation System Using Genetic Algorithm	International Journal of Engineering Research and Technology (IJERT)	2013/9
31	An Intelligent system based on genetic algorithm for database	IIJC,2013,	2013/4

National and International Conferences:

32	An Overview of Speaker Recognition: Conceptual Framework and CNN based Identification Technique	International Hybrid Conference on Advanced Research in Engineering and Technology (ARET-2022) –springe book chapter	2022
33	Brain Tumor Segmentation Using FCM In MRI Images.	Proceedings of IEEE-ICNTET Conference,	ICNET-IEEE International conference 2018
34	Privatizing Location: An Approach Towards Social Application	Proceedings of International Conference on Communication, Computing and Information Technology, department of Computer Science.	2017/2/4
35	handwritten address interpretation using PIN code validation	NCNTE-2010	2010
36	Adaptive call admission	ICCNS -2008, international conference	2008/09/27

	control for wireless mobile network		
37	An overview of Next generation Networks	International conference, Coimbatore college of technology, Coimbatore	2008
39	A fuzzy approach to English numeral recognition	S.I.E.S.NCC	2008

Workshop Attended/organized:

1. Attended workshop on "Intellectual Property Rights" at TEC(1-day) from 4/8/18---4/8/18.
2. Attended workshop on "Research Methodology --Technical Documentation using LaTex", (3-days) from 3-5/5/18 at Appa Institute of Technology at kalaburgi
3. Attended workshop on "Block chain and crypto currency "(2-days) at TEC, 20-21/1/2018
4. Attended workshop on College of Corporate -- Technical Skills (4 weeks)—at TEC remote center on 20/2/18-18/3/18
5. Attended workshop on College to Corporate Skills, "Financial Literacy ", at TEC Remoter center on 23/1/18—19/02/18
6   Attended workshop on "Use of E-resources for teaching and Research", at PDACEG, kalaburgi(1-day) 19/5/17
7. Attended workshop on "Skill India" 25/2/16 at VJTI , matunga (1-day)
8. Attended workshop on "Networks Threats and Security", ,Xavier Institute(5-days) Of Engineering, Mahim, 6-10 july-2015
9. Attended Workshop on "Computer Networking", IIT Mumbai   4th Apr- 4th May 2014 online, 5th – 10th May 2014   Face to Face (12 week)
10. Attended Workshop on "Introduction to Research Methodology" IIT Mumbai (TEC Remote center) (2 Week) on 25th to July 04th -2012.
11. Attended Workshop on "Emerging Trends in wireless networks and security at TEC (1 Week) on 4th to 8 th July 2011.
12. Attended Workshop on "Image Processing" at TEC (5-days) on 6th to 10th July 2009.
13. Attended Workshop on "Current Trends in Information and Database technology", (1 Week) at VJIT on 3rd to 7th Jananuary-2009.
14. Attended Workshop on "Principles and Applications of GIS and Image Processing" (1-Day) at SIES Graduate School of Technology on 7 th April-2007

FDP Attended:

1. Attended Online FDP AICTE Training and Learning (ATAL) Academy on "Computational Mathematics and Artificial Intelligence for Engineers" from at Dayananda Sagar College of Engineering, Bangalore - from 13/12/2021 to 17/12/2021.
2. Attended Online FDP on " AI and DS - The Future of Tomorrow" , at MCT, Rajiv Gandhi   Institute if Technology, Mumbai from 29 th July-31 st July-2021 and 5th august-2021 to 7th August-2021
3. Attended Online FDP on "Insights of NBA", at K. C College of Engineering and Management Studies, Research. Thane(E), Mumbai from 28 th June-2021 to 30 th June-2021
4. Attended Online FDP on "Research Funding Projects and IPR", at K. C College of Engineering and Management Studies , Research. Thane(E), Mumbai from 7th June-2021 to 9th June-2021.

5.Attended workshop on "Cyber Security and Forensics (CSF-2k20)" , at P.D.A College of Engineering , Kalaburgi under TEQIP-III Govt of India initiation.

6. Attended workshop on "Use of ICT in Education for Online and Blended learning" , (4-weeks), at IIT "(TEC---Remote center) ---2/5/16-10/7/16.

7. Attended workshop on "Matlab and its applications in DIP and Pattern Recognition", (1 Week), at PDACE, Gulbarga

Research and Scholarly Contributions:

Ph.D. Research: **Title:** QUALITY OF SERIVCE DRIVEN APPROACH TO ROUTING PROTOCOL FOR WIRELESS SENSOR NETWORK APPLICATION USING SOFT COMPUTING"

➢ Major area and Specialization: QoS routing, Fuzzy Logic, Wireless Sensor Network

M. E. Research: **Title**: Development of techniques for completion and validation of handwritten PIN codes: A step towards postal Automation

➢ Major area and Specialization: Document Image Processing, Fuzzy Logic and Artificial Intelligence

Funding Received:

1. Service Oriented Architecture—University Research Grant for the year 2012-2013—Grant amount-15,000/-.

Software Tools:

Python
AR and VR tools
Network simulator Tools

Professional Association:

➢ Indian Society of Technical Education (ISTE) - Life Member

Experience:

➢ 17.3 months

Responsibilities Handled:

- Paper setter
- Paper Revaluator
- Senior Supervisor
- Syllabus setter
- Paper Moderator
- Judge of the Paper Presentation Competition
- Research Paper Reviewer
- Judge of Smart India Hackathon.
- Approved UG and PG guide.
- ISTE coordinator
- Project coordinator
- Academic Program coordinator

- IIT Remote center member

SESSION CHAIR/JUDGE:

1. Avalon at Terna Engg College
2. INTERNAL HACKATHON 2022, Held on 15/03/2022 For SMART INDIA HACKATHON at TEC, Nerul

Declaration
I hereby declare that the foregoing information are correct and complete to the best of my knowledge.

Faculty Name

Place: Navi Mumbai