

Faculty Profile

Brief Profile (Few Paragraphs)

Personal Information

- **Name:** Usha Padma
- **Designation:** Assistant Professor
- **Department:** Electronics and Telecommunication Engineering
- **Email:** kamakshimb@rvce.edu.in
- **Phone:** 080-68188428

Google Scholar / ResearchGate / LinkedIn: [Link if applicable]/

ORCID: <https://scholar.google.com/citations?user=p2UgvzwAAAAJ&hl=en>

Domain of Expertise

Research Focus

- **Primary Area:** Computer Networks, Cryptography, Network Security
- **Allied Areas:**
 - Wireless Sensor Networks, Wireless Networks
 - Information Theory and Coding, Multimedia Communication, Error Control Coding

Academic Qualifications

- **Ph.D.:** Electrical Engineering, VTU, 2024.
- **M.Sc./M.Tech:** Digital Communications and Networking, Kuvempu University, 2006.
- **B.E./B.Tech:** Electronics and Communication, Kuvempu University, 2000.

Professional Experience

Experience			
S.No	Institute/College/Industry	Job Title	Duration (From- To)
1.	M S Engineering College	Lecturer	Nov 2005 to Feb 2007

Publications & Patents

Journal Publications

1. M.B.Kamakshi, G.Sunayana, Sukrutharaj.M, Lalitha rani.N, "Security Mechanisms to Decrease Vulnerability of Ad-hoc Routing Protocols", International Journal on Computer Network and Information Security, Nov 2012, DOI: 10.5815/ijcnis.2012.12.07, Pages 65-72.
2. M.B.Kamakshi, Ajay Kumar. V, Venkatesha B V, "Development of Alarm Management Tool for an Enterprise Optical Network Element", International Journal of Scientific and Engineering Research (IJSER), Volume 4, Issue7, July 2013 Edition (ISSN 2229-5518).
3. M.B Kamakshi, Dhana pratap N, "New Roughness Entropy Fractal Dimension algorithm for denoising side scan sonar image", International Journal of Emerging Trends in Engineering and Development, Impact factor : 2.87, ISSN 2249-6149, Volume 3, Issue 4, May 2014, Pages 734-743.
4. Ms Kamakshi M B, Mohammed Mahboob Ali," Performance Analysis for DAF Cooperative Communication with different combining and modulation techniques", International Journal of Science, Engineering and Technology Research (IJSETR), Impact factor:2.49, ISSN: 2278 – 7798, Volume 3, Issue5, May 2014, Pages 1439-1443.
5. Kamakshi M B, Ankesh Kumar, " Development of Relay Selection Scheme for wireless networks", International Journal of Advance Engineering and Research Development (IJAERD), Impact factor 3.134, ISSN: 2348-4470, Volume 1, Issue 7, July 2014, Pages: 96-103.
6. Kamakshi M B, Mohammed Mahboob Ali," Implementation of Co-Operative Diversity and Space Time Coding In Wireless Networks ",International Journal of Scientific Engineering and Technology Research, Impact factor 2.763,ISSN : 2319-8885, Volume 3, Issue 18, August 2014, Pages : 3821-3828.
7. Kamakshi M B, Ranjith .s, Sisil John, Prakash Geol, "Testing Radio Network Controller (RNC) UserPlane using wireshark tool", International Journal of Advanced Research in Electrical,Electronics and Instrumentation Engineering (An ISO 3297: 2007 Certified Organization), Volume 5, Issue 5, May 2015.
8. Kamakshi M B, Kusha Gupta, Kamakshi M. B. and Prince Varghese, " Impact Assessment Of Kpis And Kqis On Communication Services Providers And Customer Satisfaction", International Journal Of Engineering Sciences & Research Technology, Volume 4, Issue 6, May 2015, Pages : 483-488.
9. Bala kishore, Ms. Kamakshi M B "Detection and prevention of black hole attack in MANETS", BEST: International Journal of Management, Information Technology and Engineering (BEST: IJMITE), ISSN: 2348-0513, Volume 3, Issue 9, pp. 101-108, September 2015.
10. Apoorva U, Kamakshi M. B., "Cooperative Spectrum Sensing over Rayleigh Fading Channel for Cognitive Radio", International Journal of Emerging Technology in Computer Science and Electronics (IJETCSE), Volume 23, Issue 5, Sep 2016, ISSN: 0976-1353.

11. Ojaswi, Megha G. Patil, Pratik Srivastava, Usha Padma, "Skin Lesion Classification Using Image Processing And Convolutional Neural Networks", *Wutan Huatan Jisuan Jishu*, Volume XVI, Issue VI, June 2020, ISSN:1001-1749, pp. 384–397.
12. Harish S E, Keshav Priyadarshi, Usha Padma, " Vehical Number Plate Detection Using Histogram Analysis", *International Research Journal of Engineering and Technology (IRJET)*, Volume 07, Issue 07, July 2020, e-ISSN: 2395-0056, pp.1322-1327.
13. Usha Padma, H V Kumaraswamy, Ravishankar S, "Development of relay selection method for audio transmission in cooperative ad hoc networks", *International Journal of Advanced Computer Science and Applications*, November 2020, Volume 11, Issue 10, pp. 83–89.
14. Usha Padma , H.V.Kumaraswamy and S.Ravishankar, " Development of Relay Selection Algorithm for Video Transmission in Cooperative Adhoc Networks" *International Journal of Engineering Science and Computing(IJESC)*, Vol. No 12 Issue No 12, 2022.
15. Usha Padma, R Bhagya, "Agricultural Land suitability Analysis for Four Major Crops Using Satellite Imagery and G Is Techniques", [*Journal of Computational Analysis and Applications \(JoCAAA\)*, Vol. No. 33, Issue No. 5](#), pp.748-754.

Conference Papers

1. [Author(s)], "[Title]," *[Conference Name]*, [Year].
 1. M.B.Kamakshi, Satish Hatti, " Performance Analysis of ETX and ETT Routing Metrics over AODV Routing Protocol in WMNs", *International Workshop on AD-HOC & Ubiquitous Computing (AUC 2012)*", (AIRCC), 22nd to 24th Dec 2012, Published in *Computer Networks and Communications (Netcom) Lecture Notes in Springer Electrical Engineering* , DOI:10.1007/978-1-4614-6154-8_79, Volume 131, 2013, pp.817-826, Hotel Benzz Park, Chennai, India.
 2. M.B.Kamakshi, Ayesha Banu, "Low power modified ExOR Algorithm for Cooperative Networks", *International Conference on Information & Communication Engineering (ICICE-2013)*, 28th -29th June 2013, Dr.AIT, Bangalore.
 3. Achala G , Vikram Seshasai, Kamakshi M B, "An Overview on Network Debugging and Visualization using Available Automated Network Debugging Tools", *International Conference on Mechanical , Civil, Electronics & Communication and Computer Society Engineering(ICMCECE-16)* , Organized by Bangalore Technological Institute (BTI) in association with Institute of Research and Journal (IRAJ), held on 23rd April 2016.
 4. Usha Padma, Dandigunta sai Deepthi, Ravi Kumar , " Simulation of BPSK Costas Loop For Optical Inter satellite Link", 2nd IEEE International Conference on Recent Trends in Electronics, Information & Communication Technology (RTEICT-2017), Organized by Sri Venkateshwara College of Engineering (SVCE), Bengaluru, held on 19-20 May 2017, IEEE XPLORE ISBN : 978-1-5090-3704-9.
 5. Usha Padma, Hemalatha D, " Development of Power and Bandwidth Allocation Algorithm for large Scale DSA System using Particle filtering method", 2nd IEEE International Conference on Recent Trends in Electronics, Information & Communication Technology (RTEICT-2017), Organized by Sri Venkateshwara College

- of Engineering (SVCE), Bengaluru, held on 19-20 May 2017, IEEE XPLORE ISBN : 978-1-5090-3704-9.
6. Usha Padma, H.V.Kumaraswamy and S.Ravishankar, " Survey on Resource Allocation Techniques in Cooperative Communication", International conference on Signal, Image Processing, Communication and Automation (ICSIPCA-2017), Organized by JSS Academy of Technical Education, Bengaluru, on 6th - 7th July 2017.
 7. Usha Padma, Kavyashree B S , "Implementation of VoIP systems by replacing EPABX voice systems", 2018 3rd IEEE International Conference on Recent Trends in Electronics, Information & Communication Technology (RTEICT-2018), organized by department of Electronics and Communication engineering, Sri Venkateshwara college of engineering, Bengaluru, 978-1-5386-2440-1/18/\$31.00, pp No. 94-97, 18-19 MAY 2018.
 8. Usha Padma, Ayush Agrawal, Prathiksha R.Puthren , "Automated Glaucoma Detection using Global Statistical Parameters of Retina Funda Images", 2018 International Conference on (ISMAC – IoT, Social, Mobile, Analytics and Cloud) (ISMAC-CVB) Organized by SCAD Institute of Technology, Palladam, held on 16-17 May 2018. Published in "Springer [Lecture Notes in Computational Vision and Biomechanics](#) book series (LNCVB, volume 30)", Pages 377-388.
 9. Usha Padma, Chandan R, "Performance Analysis of Relay Selection Algorithm for Video Transmission in Cooperative Ad-hoc Networks", International conference on Networking, Embedded and Wireless Systems (ICNEWS-2018), technically Co-Sponsored by IEEE, Organized by B M S College of Engineering, Bengaluru, on 27th - 28th December 2018.
 10. Usha Padma, Chaithra B R, Arpitha R, "Performance Analysis of Channel Coding Techniques for Cooperative Adhoc Networks", *Third International Conference on Electronics, Communication and Aerospace Technology (ICECA 2019)*, ISBN: 978-1-7281-0167-5, 12-Jun-2019.
 11. Usha Padma, Aishwarya V Angadi, Yashaswini S D, "RF Planning and Optimization Practices Applied to Improve the KPI's of 4G LTE Network", *Third International Conference on Electronics, Communication and Aerospace Technology (ICECA 2019)*, ISBN: 978-1-7281-0167-5, 12-Jun-2019.
 12. Usha Padma, Chaithra B R, Arpitha R, "Cooperative Hybrid Automatic Repeat Request Based On Number Of Retransmissions", *4th International conference on Communication and Electronics Systems (ICCES 2019)*, ISBN: 978-1-7281-1261-9, pp: 2176-2180, 17-Jul-2019.
 13. Usha Padma, Gayathri G, Jhanavi B S, T. yathin sai, "Modified 802.11b for Co-operative Ad-Hoc networks", *4th International conference on Communication and Electronics Systems (ICCES 2019)*, ISBN: 978-1-7281-1261-9, pp: 737-742, 17-Jul-2019.
 14. [Usha Padma](#), [Samana H. Managoli](#), " Data Analysis for Implementing an Efficient Testing Model in Software Testing Using Machine Learning", *Third International Conference on Intelligent Computing, Information and Control Systems, Advances in Intelligent Systems and Computing*, vol 1415. Springer, Singapore. https://doi.org/10.1007/978-981-16-7330-6_57.

15. Usha Padma, H.V.Kumaraswamy and S.Ravishankar, "Transmission of Video with Convolutional Coding in Cooperative Adhoc Networks", International Conference on Applied Artificial Intelligence and Computing(ICAIC-2022), held at Narasu's Sarathy Institute of Technology, Salem, India, ISBN:978-1-6654-9709-1, pp. 1613-1618.
16. Usha Padma, Alok Chakravarthy, "A Comprehensive study of Automation Using a Webapp Tool for Robot Framework", International Conference on Intelligent Cyber Physical Systems and Internet of Things(ICoICI 2022), Organized by Department of EEE, JCT College of Engineering and Technology, held on 11-12th August 2022 at Coimbatore, Tamil Nadu, India.
17. Usha Padma, Sumit M Sangannavar, Sohangi Srivastava and GN Sagara, " [Door Lock System Using Cryptographic Algorithm Based on Internet of Things](#)", Proceedings of Third International Conference on Sustainable Expert Systems: ICSES 2022, Published by Springer Nature Singapore, pp. 435-447.
18. Usha Padma, M Praagna Prasad, " [Performance Analysis of ExpressJS and Fastify in NestJS](#)", International Conference on Robotics, Control, Automation and Artificial Intelligence, 2022, Published by Springer Nature Singapore pp. 1037-1049.

Patents **[Filed]**

1. IOT Based Digital Testing and Characterization of Photonic Device, 433518-001, October 2024.

Professional Memberships

- IETE

Student Supervision

- **M.Tech/M.Sc. Students:** 19
- **Undergraduate Research Mentees:** 35

Teaching

Core Courses: **[Current semester]**

- [ET363IA] Data Communications and Networking
- [HS124TC] Fundamentals of Indian Constitution

Advanced/Lab Courses:

- Data Communications and Networking Lab

Responsibilities

- **Academic:** DCN Lab In-charge.
- **Administrative:** Exam Unit Coordinator

External Connect

1. Delivered talk on "Quality Through Accreditation" at HKBK College of Engineering, Bengaluru through online mode on 17th February 2021.
2. Delivered talk on "Routing Protocols Using CISCO Packet Tracer", one week FDP on "Data analytics using AI & ML", at HKBK college of Engineering, Bangalore, organized by the department of E & C in collaboration with LION India research & Innovation private limited, on 17.4.21 (Online) from 11.30-12.30 PM.