

Faculty Profile

Brief Profile (Few Paragraphs)

Faculty Photo

Personal Information

- **Name:** Dr. Kumaraswamy H.V.
- **Designation:** Professor
- **Department:** Electronics and Telecommunication Engineering
- **Email:** kumaraswamyhv@rvce.edu.in
- **Phone:** 9845316282

Google Scholar: <https://scholar.google.com/citations?user=3HKXCbQAAAAJ&hl=en>

LinkedIn: https://www.linkedin.com/in/kumara-swamy-02747b8b?lipi=urn%3Ali%3Apage%3Ad_flagship3_profile_view_base_contact_details%3BQuTAV97LT1i6DvCMYQWDeQ%3D%3D

ORCID: <https://orcid.org/0000-0002-5260-4549>

Domain of Expertise

Research Focus

- **Primary Area:** Communications, Smart antenna, Signal processing and Networking
- **Allied Areas:**
 - Coding and Networking

Academic Qualifications

- **Ph.D.:** Electrical & Electronics Engineering Sciences, VTU, 2012
- **M.E:** Electronics, Bangalore, 1997
- **B.E.:** Electronics & communication, Mysore, 1987

Professional Experience

Experience				
S.No	Institute/College/Industry	Job Title	Duration From-	To
1	RVCE	Professor	15/01/25	Till date

2	RVCE	Professor & Associate dean	5/5/2025	15/01/25
3	RVCE	Professor & HOD	5/3/2012	5/5/2015
4	RVCE	Professor	27/2/2012	5/3/2012
5	RVCE	Asst Professor	1/11/1999	27/2/2012
6	RVCE	Lecturer	7/3/1994	1/11/1999

Publications & Patents

Journal Publications

1. K Chandrasekhar & Kumaraswamy H V, "Performance Evaluation of Pisarenko Harmonic Decomposition and Music-like Algorithms for Narrowband spectrum sensing in Cognitive Radio", at International Journal of Scientific and Industrial Research, July 23, 2019, Vol 78 July – 2019, pp 473–477, ISSN: 00224456
2. SiddharthTathagat, Rahul R Sherekar, H.V.Kumaraswamy, "Chaos And Ann Based Cryptography" at International Journal of Engineering Technology Research & Management, IJETRM, July –2020 ,Vol-4 Issues 07.ISSN: 2456–9348.
3. Usha V, Kumaraswamy H V, "A Review on Advanced Host Controller Interface (AHCI)", International Research Journal of Engineering and Technology, IRJET, July 2020, Volume:07 Issue: 07 | e-ISSN: 2395–0056.
4. Usha padma, Kumaraswamy H V, Ravishankar S, "Development of Relay Selection Method for Audio Transmission in Cooperative Ad Hoc Networks" at, International Journal of Advanced Computer Science and Applications, IJACSA, Vol. 11, No. 10, 2020, DOI: 10.14569/IJACSA.2020.0111011
5. Shreya Ramakanth, Soundarya Soundarresan, Dyana Arumuganaina, Reena Mamgain & Hosadurga V. Kumaraswamy: "Extraction of jet engine parameters from micro-Doppler signatures using continuous wavelet transform"; IET Radar, Sonar & Navigation, March 2021, IET Radar Sonar Navig. 2021;15:pages:194–207, DOI: 10.1049/rsn2.12029. [<https://doi.org/10.1049/rsn2.12029>]
6. Rani RN. H V Kumaraswamy, JeyarajChellapandi , " Implementation of End to End Automation for BTS commissioning using Python", International Research Journal on Advanced science hub , July 2021, Volume 03 Issue 07, pages 36–41.
7. Kumaraswamy H V, Nagaraju P, & others "Analysis of SWASTIK-shaped slotted MSPA Antenna for 5G sub band applications" at International conference on Intelligent Engineering Approach,, at SLN college of Engineering Raichur Karnataka,, April 2022
8. Iffath Fawad, Kumaraswamy H V, "Extended Nested Array Configuration with Increased Degrees of Freedom for DOA Estimation", International Journal for Research in Applied Science and Engineering Technology Volume 10, Issue V, May 2022.[<https://doi.org/10.22214/ijraset.2022.42650>]
9. Iffath Fawad, Kumaraswamy H V, "Failure Recovery in a Smart Antenna System for Remote Applications", International Journal for Research in Applied Science and Engineering Technology, Volume 10, Issue V, May 2022. [<https://doi.org/10.22214/ijraset.2022.42713>]
10. Sharmada K, Kumaraswamy H V, "Performance Analysis Of Sparse Code Multiple Access", International Research Journal of Modernization in Engineering Technology and Science, Volume:04/Issue:07 Pages:2944–2947, July 2022.

11. Netravati S, Kumaraswamy H V, Shravan Prakash, Ragesh Radhakrishnan "Automation Test Framework for Radar Application Features of Blind Spot Detection and Rear Cross Traffic Alert", International Journal of Emerging Trends & Technology in Computer Science Volume 11, Issue 4, Pages 48-54, July-Aug 2022.
12. Sudarshan B, Neeraj L, Nakul R S, Dr Aravind K, Kumaraswamy H V, & Dr Vinay Hegde. "Detection of Vulnerable GITHUB workflows using Machine Learning", International Journal of Emerging Research & Technology Volume 11, Issue 10, Pages 132-135, sept 2022.
13. Nagaraju P, Sachina D H, Imran khan, Kumaraswamy H V, & sudhindra K R. "Analysis of C-shape slotted MSPA for 5G sub band applications on three different substrates", International Journal of Electronics and Telecommunication, Volume 68, Issue 4, Pages 715-719, Oct 2022.[DOI: 10.24425/ijet.2022.143877]
14. Usha padma, Kumaraswamy H V, Ravishankar S, "Development of Relay Selection Algorithm for Video Transmission in Cooperative Adhoc Networks" at, International Journal of Engineering Science and Computing, Volume 12 Issue No.12, pages 29916-29923, Dec 2022.[<https://doi.org/10.14569/ijacsa.2020.0111011>]
15. Nagaraju P, Kumaraswamy H V, & sudhindra K R and etc. "Design of Compact Sized Frequency Reconfigurable Spiral Antenna for 5G Applications", Worldwide Journal of Multidisciplinary Research and development , Pages 128-133, E-ISSN: 2454-6615 Dec 2022.

Conference Papers

1. Rajjesh M N, Nishith Rao , Shrisha B K, Kumaraswamy H V "An analysis of BER comparison of various digital modulation schemes used for adaptive modulation" 2016 IEEE International Conference on Recent Trends in Electronics, Information & Communication Technology(RTEICT), Sri Venkateswwara college of Engineering Bangalore, on 20th to 21st May 2016 Paper ID 237, DOI: 10.1109/RTEICT.2016.7807820
2. Basavaraju D R, Kumaraswamy H V, Madhusudhan Kothari "Design and Simulation of Micro strip Narrow Band Pass Filter For Asian Pacific Telecommunication Band 28" 2017, 2nd IEEE International Conference on Recent Trends in Electronics, Information & Communication Technology(RTEICT), Sri Venkateswwara college of Engineering Bangalore, on 19th to 20th May 2017, Page: 1303-1306. DOI: 10.1109/I2C2.2017.8321919
3. Basavaraju D R, Kumaraswamy H V, Madhusudhan Kothari, Siddesh Kamath, "Inter-digital Band Pass filters for Duplexer Realization for LTE Band 28" at IEEE sponsored, International conference on Intelligent Computing and Control (I2C2) held at Karpagam College of Engineering, Coimbatore Tamilnadu on 23 to 24th march 2017, Page 63-66, DOI: 10.1109/RTEICT.2017.8256811
4. Usha padma, Kumaraswamy H V, Ravishankar S, "Survey of resource allocation Techniques in cooperative communication" at, International conference on "signals, image processing, communication and automation". (ICSIPCA-2017), on 6th to 7th march 2017, at JSS Academy of Technical Education Bangaluru.
5. Kumaraswamy H V, IffathFawad, "Performance Analysis of Non Uniform Linear Arrays using MUSIC Algorithm for Under Water Communication" at, Second International conference on Circuits, Controls and Communications, at RNSIT Bangalore. On 15th & 16th Dec 2017. Page 143-148, Published in: IEEE Xplore Digital Library, ISBN no. : 978-1-5386-0615-5, DOI: 10.1109/CCUBE.2017.8394132
6. Kumaraswamy H V, Nagaraju P, "C-Band Dual Cross Polarized Wide band High Gain Polarization Reconfigurable Stacked Patch Antenna Array" at International conference on Networking, Embedded and Wireless Systems ICNEWS -2018, at BMSCE Bangalore. On 27th & 28th Dec 2018. Paper ID 127, DOI: 10.1109/ICNEWS.2018.8904023
7. Mrityunjaya D. Hatagundi & Kumaraswamy H V, "A comprehensive survey on Different Attacks on SDN and Approaches to Mitigate", at International Conference on Computing Methodologies and Communication [ICCMC-2019] at Surya Engineering college Erode Tamil Nadu India on 27-29th March 2019, ISBN: 978-1-5386-7808-4, DOI: 10.1109/ICCMC.2019.8819717.

8. Gourav G Vaidya & Kumaraswamy H V, "A survey on web server load balancing Techniques using defined networking", at 4th IEEE International Conference on Recent Trends in Electronics, Information & Communication Technology, Sri Venkateswara college of Engineering, Bangalore, RTEICT-2019, 17th -18th May 2019,978-1-7281-0630-4/19/\$31.00 ©2019 IEEE.
9. Mohammad AzharuddinInamdar, & H. V. Kumaraswamy "Accurate Primary user Emulation Attack (PUEA) Detection in Cognitive Radio Network using KNN and ANN classifier", at 4thFourth International Conference on Trends in Electronics and Informatics (ICOEI 2020), Sri SCAD College of Engineering and Technology Tirunelveli, Tamil Nadu, INDIA, 15th -17th June 2020. CFP20J32-DVD; ISBN: 978-1-7281-5517-3,DOI: 10.1109/ICOEI48184.2020.9143015.
10. Mohammad AzharuddinInamdar, & H. V. Kumaraswamy "Energy Efficient 5G Networks: Techniques and Challenges", at International Conference on Smart Electronics and Communication (ICOSEC 2020.), Kongunadu College of Engineering and Technology, Trichy, Tamil Nadu, India10th -12th sept 2020. Paper ID 225, ISBN: 978-1-7281-5460-2, DOI: 10.1109/ICOSEC49089.2020.9215362.
11. Iffath Fawad, Kumaraswamy H V "Enhanced Performance Smart Antenna System using Levy Based Optimization Algorithms for Mobile Communication", at 2021 IEEE International Conference on Mobile Networks and Wireless Communication Organized by Sri Siddhartha institute of Technology Tumakuru, 3rd -4th Dec 2021.
12. Iffath Fawad, Kumaraswamy H V "Effects of Microstrip Array Failures in a Smart Antenna System for 5G Mobile Communication.", at 5th International Conference on Computational Systems and Information Technology (CSITSS-2021) International Conference on Intelligent Computing and Communication (ICICC-2021) Organized by R V college of Engineering Bangalore, 16th -18th Dec 2021. [DOI: 10.1109/CSITSS54238.2021.9682895]
13. Kumaraswamy H V, Nagaraju P, & others "An Overview of Slotted MSPA for 5G Applications" at International conference on Innovations and Recent Trends in Computer Science (ICIRTCS-22), St. Martin's Engineering College, Secunderabad , 25th & 26th March 2022.
14. Usha Padma, kumaraswamy H V, Ravishankar S, "Transmission of Video with Convolutional Coding in Cooperative Ad Hoc Networks", at International Conference on Applied Artificial Intelligence and Computing ICAAIC 2022, Narasu's Sarathy Institute of Technology, Salem, Tamil Nadu, ISBN: 978-1-6654-9709-1, Pages:1613 to 1619, 9th -11th May 2022. DOI: 10.1109/ICAAIC53929.2022.9793059
15. Dharshan T G, Kumaraswamy H V, "Design of 28/38GHz dual-band vertically stacked dipole antenna for millimeter-wave 5G communication", at International Conference on Artificial Intelligence and Data science AIDE 2023, , 28 th Oct 2023.DOI: 10.1109/ICMNWC52512.2021.9688419
16. Deepak Patel M Kumaraswamy H V "Enhanced Performance Smart Antenna System using Levy Based Optimization Algorithms for Mobile Communication", at International Conference on, International Conference on Recent Advances in Science & Engineering Technology 5th Nov 2023.
17. Sai shrushti, H V kumaraswamy, B Roja Reddy, Tunna Baitha, "Implementation of Object Detection for Autonomous Vehicles by LiDAR and Camera Fusion"2024 IEEE International Conference on Interdisciplinary Approaches in Technology and Management for Social Innovation (IATMSI), 14-16 March 2024, DOI: 10.1109/IATMSI60426.2024.10503013
18. Anagha B R, kumaraswamy,H V , "Weighted Deep Learning implementation for Cognitive Radio Attack Detection" 2024 IEEE International Conference on Computational Intelligence and Communication Networks 2024, 22-23 Dec 2024.
<https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=10847540>

Books/Book Chapters

1. H V kumaraswamy, P Nagaraju, *Signals and Systems*, Scitech Publications, 2004.ISBN: 8188429260.

Patents **[Filed / Published / Granted]**

1. [Patent Title], [Patent No.], [Year].

R & Grants & Consultancy Projects

Ongoing & Completed Research Projects

- [Project Title] – Funding Agency: [Name], Duration: [Year-Year], Role: [PI/Co-PI].
- [Project Title] – Funding Agency: [Name], Duration: [Year-Year], Role: [PI/Co-PI].

Ongoing & Completed Consultancy Projects

- [Project Title] – Funding Agency: [Name], Duration: [Year-Year], Role: [PI/Co-PI].
- [Project Title] – Funding Agency: [Name], Duration: [Year-Year], Role: [PI/Co-PI].

Professional Memberships

- IEEE member
- Fellow IETE member
- ISTE Life member

Awards & Recognitions

- Best Teacher award, Cognizant, 2016

Student Supervision

- Ph.D. Candidates: 1 Student 5 Graduated
- M.Tech/M.Sc. Students:
- Undergraduate Research Mentees:

Professional Roles

- Editorial Board:
- Chair/Committee Member:

- For National conference, at Dr Ambedkar Institute of Technology Bangalore on 08/06/2019.
- For The 6th International Conference on “Computational Systems and Information Technology for Sustainable Solutions” [CSITSS – 2022], At RVCE on 23/12/2022
- Chair/Reviewer on 8th IEEE International Conference on Computational Systems & Information Technology for Sustainable Solutions (CSITSS), 7th to 9th Nov 2025.
- Industry Advisor: LRDE

Teaching

Core Courses: [Current semester]

- Antenna Array and Applications MDC234IA
- Fundamental of Avionics AS345AT

Advanced/Lab Courses:

- [e.g., Mechatronics Lab, Advanced Structural Analysis]

Professional Roles

Responsibilities

- Academic: HOD / Associate Dean for PG
- Administrative: Lab In-charge,

External Connect

- BOS member of SIT Tumkur, Jain University Bangalore.
- BOE member of MSRIT Bangalore, SIT Tumkur, Dr AIT Bangalore, CAT Bangalore.
- Interview panel member of BIT Bangalore, MSRIT Bangalore, Dr AIT Bangalore, IIIT Bangalore, PESIT Bangalore-south, BMSIT. Bangalore
- Academic Advisory Board member of Jyothi Institute of Technology Bangalore.
- Question paper auditing member of Dr AIT Bangalore, BMSCE Bangalore.
- Academic audit member of SIT Tumkur, BMSIT. Bangalore