

CURRICULUM VITAE

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Assistant Professor

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Qualification	<ul style="list-style-type: none">• Ph.D. (Electrical & Electronics Engineering) Visvesvaraya Technological University, Belagavi, 2023• M.Tech. (Digital Electronics & Communications) Basaveshwar Engineering College, Bagalkote Visvesvaraya Technological University, Belagavi, 2014• B. E. (Electronics & Communication Engineering) Smt. Kamala & Shri Venkappa M. Agadi College of Engineering & Technology, Laxmeshwar-582116 Visvesvaraya Technological University, Belagavi, 2010
My ID's	<ul style="list-style-type: none">• Vidwan ID: 125080• Scopus ID: 57189245728• Researcher ID: AAR-8908-2020• Google Scholar ID: sq_EtqYAAAAJ• ORCID ID: 0000-0002-6906-6548
Ph.D. Title	Intelligent Security and Privacy Schemes for Internet of Things.
M. Tech. Project Title	Mobile Agent Based Reliable Routing Scheme in Vehicular Ad-hoc Networks.
B. E. Project Title	Design of 6-bit Dadda Multiplier using Cadence Tool.
Subject Handled	Digital Electronics and Logic Design, Electronics Devices and Measurements, Information Theory and Coding, Embedded System, Microwave Engineering, 8051 Micro controller & Embedded System, Multimedia Communication, Network Analysis, Linear Integrated Circuits and its Applications, Basic Electronics, Introduction to Electronics & Communication Engineering.
Area of Interest	Internet of Things (IoT), Data/Network Security, Data Communication and Networking, Wireless Sensor Networks (WSNs), Wireless Ad-hoc Networks, Wireless Communication, Computational Intelligence.

Experience	14 Years Teaching Experience 07 Research Experience
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Projects Guided	PG: 02 UG: 12
Administrative Responsibilities	<ul style="list-style-type: none"> • Internship Coordinator Department level • NPTEL Coordinator Department level (2023-2025) • Spoken Tutorial coordinator 2024 till date • Admission coordinator • Anti-Ragging Coordinator • Health and wellness Coordinator • Board of Studies (BoS) member for Department of Electronics and Communication Engineering • Valuation Coordinator for Department of Electronics and Communication Engineering for the academic year 2020-2021 • Member and brand ambassador of Institution Innovation Council (IIC) cell of Basaveshwar Engineering College, Bagalkot • Department bulletin editor
Research Grants	<p>Received “Research Grants for Scientists/Faculty (RGS/F)”, from Vision Group on Science and Technology (VGST), Department of Information Technology, Biotechnology and Science and Technology (Dept. of IT & BT), Government of Karnataka of Rs. 3,00,000=00 (3 Lakhs) 2019-2020. Project Title: Intelligent Authentication Scheme for Internet of Things.</p>
Student Grants	<p>Received “Project Grants for Student Project Programme – 48th Series”, from Karnataka State Council for Science and Technology (KSCST) Department of Information Technology, Biotechnology and Science and Technology (Dept. of IT & BT), Government of Karnataka of Rs. 5,000=00 (Five Thousand) 2024-2025. Project Title: CRYSENSE: Intelligent Cradle System using Internet of Things.</p>
Incentives	Received incentives of Rs. 5000.00 from college for the research journal (Q1) publication (2024-25).
Publications	
Books/Chapters	<ul style="list-style-type: none"> • Poornima M. Chanal, Mahabaleshwar S. Kakkasageri, Sunilkumar S. Manvi, “Security and Privacy in Internet of Things: Computational Intelligent Techniques based Approaches”, Contributed chapter in book titled, “Recent Trends in Computational Intelligence Enabled Research”, Elsevier publisher. (Citations-37)
Journals	<ul style="list-style-type: none"> • Tarun S. J., Gururaj S. Kori, Supreet Hiremath, Poornima M. Chanal, “Machine Learning Frameworks for Effective Diagnosis of Parkinson’s Disease using NB, GNN, and GBM Algorithms”, International Journal of Computer Applications, Vol. 187, No. 42, pp. 13-25, September 2025 (Web of Science) • Gururaj S Kori, Mahabaleshwar S Kakkasageri, Poornima M. Chanal, Rajani S. Pujar, Vinayak A. Telsang, “Wireless Sensor Networks and Machine Learning Centric Resource Management Schemes: A Survey”, Ad Hoc Networks, Elsevier (Q1), 2025 • Poornima M. Chanal, Mahabaleshwar S. Kakkasageri, Rajani S. Pujar, Gururaj Kori, Chayalaxmi C. L, “Cognitive Agent based

	<p>Context Aware Authentication Scheme for IoT Devices: Regression Approach”, Journal of Information and Telecommunication, Taylor and Francis (Q2), December, 2025</p> <ul style="list-style-type: none"> • Poornima M. Chanal, Mahabaleshwar S. Kakkasageri “Blockchain based Data Integrity Framework for Internet of Things”, International Journal of Information Security, Springer Vol. 23, pp. 519–532, 2023 (Ranking: Q1, Citations: 01) • Poornima M. Chanal, Mahabaleshwar S. Kakkasageri, “Preserving Data Confidentiality in Internet of Things”, Journal of SN Computer Science, Springer, pp. 1-12, 2021. (Ranking: Q2, Citations: 21) • Poornima M. Chanal, Mahabaleshwar S. Kakkasageri, “Security and Privacy in IoT: A Survey”, Journal of Wireless Personal Communication, Springer, Vol. 115, No. 3, pp.1667–1693, 2020 (Ranking: Q2, Citations: 310) • Kirankumar B. Balavalad, Ajayakumar C. Katageri, Poornima M. Chanal and Gururaj S. Kori. “Energy Efficient Multipath Routing Protocol with Guaranteed Data Delivery for Wireless Sensor Network”, International Journal of Information and Education Technology, Vol. 04, No. 05, pp. 430-435, October 2014 (Citations: 01) • Poornima M. Chanal, “Secured Authentication Scheme for Device-to-Device Communication in IoT” (Under Progress) • Poornima M. Chanal, “Authentication Schemes for Intelligent Vehicular Cloud Networks: A Survey” (Under progress)
<p>Conferences</p>	<ul style="list-style-type: none"> • Yaseen Bagawan, Gururaj S. Kori, Poornima M. Chanal, “A Unified Vision Transformer and LSTM Framework for Traffic Estimation in Urban VANETs”, Proc. of the 2nd IEEE International Conference on Vehicular Technology and Transportation System, (ICVTTS-25), CHRIST (Deemed to be University), Bangalore, India, September 19 - 20, 2025 • Gururaj S. Kori, Poornima M. Chanal, Basavaraj M. Angadi, “A Multiagent Framework for Service Discovery in Vehicular Cloud Networks”, Proc. of the 16th IEEE International Conference on Computing, Communication and Networking Technologies (ICCCNT-19), IIT Indore, India, July 6-11, 2025 • Supreet Hiremath, Tarun S. J., Gururaj S. Kori, Md. Ashfaq Sasalatti, Poornima M. Chanal, “Effective Prognosis of Heart Attack using Supervised machine Learning Algorithms”, Proc. of the 1st International conference on Software, Systems and Information Technology (SSITCON), Bangalore, December, 2024 • Gururaj S. Kori, Mahabaleshwar S. Kakkasageri, Vijaykumar Hiremath, Poornima M. Chanal, Rajani S. Pujar, Vinayak A. Telsang, “Cognitive Swarm Drones Attack Model: A Grey Wolf Optimization”, Proc. of the 15th International IEEE Conference on Computing, Communication and Networking Technologies (ICCCNT-24), Indian Institute of Technology - Mandi, 18 – 22 June 2024 • Poornima M. Chanal, Mahabaleshwar S. Kakkasageri, “Random Forest Algorithm based device Authentication in IoT”,

Proc. of the 9th IEEE International Conference on Electronics, Computing and Communication Technologies, (CONECCT), Bangalore, July 2023

- **Poornima M. Chanal**, Mahabaleshwar S. Kakkasageri, “Secured Data Integrity Scheme for Internet of Things”, Proc. of the 2nd Asian Conference on Innovation in Technology (ASIANCON), Pune, August, 2022.
- **Poornima M. Chanal**, Mamata J. Sataraddi, Mahabaleshwar S. Kakkasageri, Rahul Jahagirdar “Performance Analysis of Ant Colony based Routing Approach for VANETs using vanetMobisim and NS2”, Proc. of the 11th International Conference on Advanced Computing (ICoAC-2019) December 18-10, 2019. (Citations: 07)
- **Poornima M. Chanal**, Mahabaleshwar S Kakkasageri, “Hybrid Algorithm for Data Confidentiality in Internet of Things”, proc. of the 10th International Conference on Computing, Communication and Networking Technologies (ICCCNT), IIT Kanpur, 2019, India (Citations: 14)
- **Poornima M. Chanal**, Mahabaleshwar S. Kakkasageri, Avani Shirbur, Gururaj S. Kori, “Energy Aware Multipath Routing Scheme for Wireless Sensor Networks”, Proc. of the 7th IEEE International Advance Computing Conference (IACC - 2017), VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad, Telangana, India, pp. 385-390, 5th -7th January 2017. (Citations-15)
- Mahabaleshwar S. Kakkasageri, Mamata J. Sataraddi, **Poornima M. Chanal**, Gururaj S. Kori, “BDI Agent based Routing Scheme in VANETs”, Proc. of the IEEE International Conference on Wireless Communications Signal Processing and Networking (WiSPNET - 2017), SSN College of Engineering, Chennai, India, pp. 129-133, 22nd - 24th March 2017. (Citations-13)
- **Poornima M. Chanal**, Gururaj S Kori, Mahabaleshwar S Kakkasageri, “Energy Efficient Multipath Routing Protocol for Wireless Sensor Networks”, Proc. of the 1st National Conference on Recent Trends in Communication and Computing [NCRTCC-2016], Jain Institute of Technology, Davangere, Karnataka, India, 27th February 2016.
- **Poornima M. Chanal**, Gururaj S. Kori, M. S. Kakkasageri, “Efficient Reliable Routing Scheme for VANETs” Proc. of the 4th IEEE International Conference on Communication and Signal Processing [ICCSP’15], pp. 937-942, Adhiparasakthi Engineering College, Melmaruvathur, Tamilnadu, India, April 2nd - 4th, 2015. (Citations-04)
- Gururaj S. Kori, M. S. Kakkasageri, **Poornima M. Chanal** “Energy Aware Cluster based Routing Scheme in Wireless Sensor Networks” Proc. of the International Conference on Advances in Engineering Technology and Science [ICAETs 2014], pp.134-138, Munnar, Kerala, India, April 26th - 27th, 2015
- **Poornima M. Chanal**, Gururaj S. Kori, M. S. Kakkasageri, “Critical Data Validation Scheme in Vehicular Ad Hoc Networks” Proc. International Conference on Advances in

	<p>Engineering Technology and Science [ICAETs 2014], pp.139-143, Munnar, Kerala, India, April 26th - 27th, 2015</p> <ul style="list-style-type: none"> • Ajayakumar C. Katageri, Kirankumar B. Balavalad, Poornima M. Chanal and Supriya B. H. “Optimization of LEACH Protocol for Effective Power Utilization in Wireless Sensor Networks”. Proc. of the 3rd International Conference on Computational Intelligence and Information Technology [CIIT 2013], IIT Bombay, India, 18th - 19th Oct 2013. (Citation: 03)
Invited Talks	<ul style="list-style-type: none"> • Resource person for student training programme (HRD) at Basaveshwar Engineering College, Bagalkot. • Invited as resource person in the ISTE-SRM short term training programme on “Recent Trends in Embedded System and VLSI” sponsored by ISTE, New Delhi and SRM University, Chennai, on 25th - 26th June 2013 held at Department of Electronics and Communications, S. R. Vastrad Rural Polytechnic Guledgudd-587203, Karnataka, India.
Events Organized	<ul style="list-style-type: none"> • Session on “Entrepreneurship in Digital Virtualization”, under IIC- 7.0 at BEC, Bagalkot on 25th February 2025 • Session on “Software Entrepreneurship”, under IIC- 6.0 at BEC, Bagalkot on 19th August 2024 • Coordinator for online session on “Entrepreneurship in the Era of Artificial Intelligence”, under IIC- 5.0 at BEC, Bagalkot on 10th August 2023 • “AVISHKAAR-14” project exhibition conducted by Department of Electronics and Communications, Basaveshwar Engineering College (Autonomous), Bagalkot, 2014
FDP/Workshop /Symposiums / Webinars/Training Programs (AICTE/ATAL /IIT/NIT) Online and Offline	<ul style="list-style-type: none"> • Two-week FDP on “Transforming Water Resources Management, Traffic Systems and E-Mobility with Quantum Computing and AI” from 17-28th Feb, 2025, NIT Patna. • ATAL FDP on "Information and Cyber Security" from 2021-6-14 to 2021-6-18 at Indian Institute of Information Technology, Vadodara. • ATAL FDP on "AI- Machine Learning & Optimization" from 1-2-2021 to 5-2-2021 at Indian Institute of Information Technology, Allahabad. • ATAL FDP on "Block chain" from 5-10-2020 to 9-10-2020 at National Institute of Technology, Meghalaya. • ATAL FDP on "Data Sciences" from 21-9-2020 to 25-9-2020 at National Institute of Technology, Karnataka (NITK). • ATAL FDP on "Internet of Things (IoT)", from 6th - 10th April 2020 at Indian Institute of Information Technology, Nagpur (IITN). • Two-week FDP on “Digital Transformation in Teaching Learning Process” (SWAYAM) conducted by IIT Mumbai, from 6-22 April 2020 • AICTE approved FDP course on “Computer Networks and Internet Protocol (SWAYAM)” conducted by Prof. Soumya Kanti Ghosh and Prof. Sandip Chakraborty, IIT Kharagpur, 27th January 2020 – 17th April 2020 • Workshop on “AICTE Examination Reform Policy”, BEC Bagalkot, 6th -7th May, 2020

	<ul style="list-style-type: none"> • “BOSS Linux Ubuntu Operating System” test conducted remotely from IIT Bombay & jointly organized by Karmaveer Bhaurao Patil College of Engineering, Satara, on 22nd April 2020. The training was offered by the Spoken Tutorial Project, IIT Bombay, funded by National Mission on Education through ICT, MHRD, Govt., of India. • “Python 3.4.3” test conducted remotely from IIT Bombay & jointly organized by Dwarkadas Jivanlal Sanghvi College of Engineering, Mumbai, on 9th May 2020. The training was offered by the Spoken Tutorial Project, IIT Bombay, funded by National Mission on Education through ICT, MHRD, Govt., of India. • “R Programming” test conducted remotely from IIT Bombay & jointly organized by Sree Vidyanikethan Engineering College (Autonomous), Tirupati, on 29th May 2020. The training was offered by the Spoken Tutorial Project, IIT Bombay, funded by National Mission on Education through ICT, MHRD, Govt., of India. • Faculty Development Programme on “Recent Advances in Signal Processing and Communication Networks”, at Basaveshwar Engineering College, Bagalkot, 17th to 19th March, 2017. • Two days International Symposium on “Green Technologies for Sustainable Development”, sponsored by TEQIP-II held at Basaveshwar Engineering College (Autonomous), Bagalkot, on 24th to 25th February 2017. • One day Workshop on “Research Methodology” organized under TEQIP-II of World Bank at, Basaveshwar Engineering College (Autonomous), Bagalkot, on 19th December 2015. • One day Workshop on “Outcome Based Education” organized under TEQIP-II of World Bank at, Basaveshwar Engineering College (Autonomous), Bagalkot, on 18th December 2015. • One day Workshop on “Curriculum Development and Reforming for UG & PG”, sponsored by TEQIP-II at Department of Electronics & Communication Engineering, Basaveshwar Engineering College (Autonomous), Bagalkot, from 25th July 2015. • Three days National Level Workshop on “Intel® Atom™ Processor based Embedded System Design and Development” at Department of Electronics & Communication Engineering, Basaveshwar Engineering College (Autonomous), Bagalkot, from 28th to 30th May 2014. • Three days’ workshop on “Advanced Network Computing and Simulation” held in Basaveshwar Engineering College, Bagalkot, 22nd to 24th November 2013. • Five days’ workshop on “Wireless Networking and Testing” held in B V Bhoomaraddi College of Engineering and Technology, Hubli, 28th August to 1st September 2013. • Three days Faculty Development Programme on “Design, Modeling and Simulation of MEMS Devices” held in Basaveshwar Engineering College, Bagalkot, 10th - 12th July 2013.
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	<ul style="list-style-type: none">• Three days Faculty Development Programme on “Soft and Evolutionary Computing Techniques and its Applications” held in Basaveshwar Engineering College, Bagalkot, 30th May - 1st June 2013.• Three days National Level Workshop on “Technical Documentation Using LATEX” held in Basaveshwar Engineering College, Bagalkot, 27th to 29th May 2013.• Three days National Level Workshop on “Implementation of Signal Processing Algorithms Using FPGAs” held in Basaveshwar Engineering College, Bagalkot, 23rd to 25th May 2013.• Three days Faculty Development Programme on “Recent Advances in Wireless Networks” held in Basaveshwar Engineering College, Bagalkot, 16th to 18th May 2013.• Three-day training program on “Effective practices of teaching” held in Basaveshwar Engineering College, Bagalkot, 3rd to 5th March 2012.• One day training program on “Human Resources Development” held in KLE Engineering College & Technology, Chikodi, 28th January 2011.
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