




# DAYANANDA SAGAR ACADEMY OF TECHNOLOGY AND MANAGEMENT

(Affiliated to Visvesvaraya Technological University, Belagavi & Approved by AICTE, New Delhi)

Opp. Art of Living, Udayapura, Kanakapura Road, Bangalore- 560082

## DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Accredited NBA, NAAC with A+, New Delhi

<b>Faculty Name</b>	<b>Dr. Ravi Gatti</b>	
<b>Academic Designation</b>	<b>Assistant Professor</b>	
<b>Educational Qualification</b>	<b>BE, M. Tech, Ph. D</b>	
<b>Experience in Years</b>	<b>9</b>	
<b>Area of Interest</b>	<b>Embedded Systems. ML&amp;AI and Wireless Communication</b>	
<b>Date of Birth</b>	<b>30/07/1989</b>	
<b>Email ID</b>	<b>ravigatti-ece@dsatm.edu.in</b>	

### Educational Details

- Ph. D. - Visvesvaraya Technological University (VTU), Belagavi, Karnataka, 2022.
- M. Tech - R V College of Engineering, Bangalore (RVCE), VTU, 2013.
- B.E - Bhageerathi Bai Narayana Rao Maanay Institute of Technology (BNMIT), Bangalore under VTU, 2011.

### Personal Details

- Date of Birth: 30/07/1989
- Hobbies: Traveling, Playing Cricket and Volleyball
- Languages Known: English, Kannada, Hindi

### Professional Experience

- Worked as Assistant Professor in SVCE at Bengaluru from 30-08-2013 to 31-03-2022

### Publications

#### International Journals:

- Ravi Gatti, "Effects of Bidirectional Resource Allocation Schemes for Advanced Long Term Evolution system in Heterogeneous Networks", International Journal of Communication Networks and Distributed Systems, Inderscience Publisher, ISSN: 1754-3916 (print), ISSN: 1754-3924 (online), Volume 27(3), pp-241-258, 2021 <https://doi.org/10.2174/2666255813666200814171401>, 2021.
- Ravi Gatti, "Improved Resource Allocation Scheme for Optimizing the Performance of Cell-Edge Users in LTE- A System", Journal of Ambient Intelligence and Humanized Computing, Springer Publisher, ISSN: 1868-5137 (print), ISSN: 1868-5145 (online), pp. 811-819, DOI: <https://doi.org/10.1007/s12652-020-02084-x>, 2022
- Ravi Gatti, "Bidirectional resource scheduling algorithm for advanced long term evolution system", Engineering Reports, Vol. 2, no. 7, pp. 1-16, e12116 © John Wiley & Sons Ltd, Online ISSN: 2577-8196, DOI: <https://doi.org/10.1002/eng2.12192>, 2020.

- Ravi Gatti, "Extension of Modified Joint Uplink and Downlink Scheduling algorithm for LTE-A in Femtocell Networks", International Journal of Sensors, Wireless Communications and Control, Bentham Science Publisher, ISSN: 1868-5137 (print), ISSN: 1868-5145 (online), Vol. 10 , No. 5, pp- 699-706, DOI: 10.2174/2210327909666191126112740, 2020.

#### **International Conferences:**

- Ravi Gatti and Dr. Shivashankar, "Study of different resource allocation scheduling policy in advanced LTE with carrier aggregation", 2017 2nd IEEE International Conference on Recent Trends in Electronics, Information & Communication Technology, pp.2257-2261, DOI:10.1109/RTEICT.2017.8257002, 2017.
- Ravi Gatti, and Dr. Shivashankar, "Improvement of speed in data collection rate in tree based wireless sensor network", 2016 IEEE International Conference on Recent Trends in Electronics, Information & Communication Technology, pp. 720-723, DOI: 10.1109/RTEICT.2016.7807918, 2016.
- Ravi Gatti and Dr. Shivashankar, "Design of frequency synthesizer for wireless communication", 2017 2nd IEEE International Conference on Recent Trends in Electronics, Information & Communication Technology, pp. 1794-1798, DOI: 10.1109/RTEICT.2017.8256908, 2017.
- Ravi Gatti, G. Arjun Kumar, "Design And Implementation Of Smart Shopping Basket," 2020 International Conference on Recent Trends on Electronics, Information, Communication & Technology (RTEICT), 2020, pp. 287-291, DOI: 10.1109/RTEICT49044.2020.9315702.
- Ravi Gatti and K. Sunil Kumar, "Design and Implementation of Vision Module for Visually Impaired People," 2020 International Conference on Recent Trends on Electronics, Information, Communication & Technology (RTEICT), 2020, pp. 373-377, DOI: 10.1109/RTEICT49044.2020.9315645.
- R. Gatti, R. H. A, P. R, P. K and V. S, "Advanced Heart Rate Detection Using Embedded System," 2018 3rd IEEE International Conference on Recent Trends in Electronics, Information & Communication Technology (RTEICT), 2018, pp. 1488-1493, doi: 10.1109/RTEICT42901.2018.9012224.
- Ravi Gatti, K. N. S. Kumar, P. R. Prasad, and Shivashankar, S., "Opportunistic routing technique for minimized energy consumption for relay node selection in wireless sensor networks," 2016 IEEE International Conference on Recent Trends in Electronics, Information & Communication Technology (RTEICT), 2016, pp. 2093-2097, doi: 10.1109/RTEICT.2016.7808208.
- Ravi Gatti, Aishwarya, Harika, R. B. Nandini and C. Gagana, "Boat Navigation and Safeguard of Passenger's Over Flood Disaster," 2018 3rd IEEE International Conference on Recent Trends in Electronics, Information & Communication Technology (RTEICT), 2018, pp. 2274-2277, doi: 10.1109/RTEICT42901.2018.9012387.
- Ravi Gatti and D. R. Basavaraju, "Tracking of Fuel Road Tankers for Antipilferage and Antiadulteration," 2019 4th International Conference on Recent Trends on Electronics, Information, Communication & Technology (RTEICT), 2019, pp. 1184-1187, doi: 10.1109/RTEICT46194.2019.9016847.
- R. Gatti, N. Nataraja, T. Sarala, S. S. Kumar, R. P. Prasad and S. K. N. Kumar, "Development of Automated System for Detection of Diabetic Retinopathy," 2021 International Conference on Recent Trends on Electronics, Information, Communication & Technology (RTEICT), 2021, pp. 943-946, doi: 10.1109/RTEICT52294.2021.9573723.

- R. Gatti, S. S. Kumar and N. N, "Implementation of Smart Card for Vehicles Documentation Verification Using IoT," 2021 International Conference on Recent Trends on Electronics, Information, Communication & Technology (RTEICT), 2021, pp. 965-969, doi: 10.1109/RTEICT52294.2021.9573975.
- R. Gatti, S. S. Kumar, N. Nataraja, T. Sarala, S. K. N. Kumar and A. G. B. Kumar, "Implementation of Health Monitoring System for Patients using Li-Fi Technology," 2021 International Conference on Recent Trends on Electronics, Information, Communication & Technology (RTEICT), 2021, pp. 939-942, doi: 10.1109/RTEICT52294.2021.9573585.
- K. N. S. Kumar, G. B. A. Kumar, P. P. Rajendra, R. Gatti, S. S. Kumar and N. Nataraja, "Face Mask Detection and Temperature Scanning for the Covid-19 Surveillance System," 2021 International Conference on Recent Trends on Electronics, Information, Communication & Technology (RTEICT), 2021, pp. 985-989, doi: 10.1109/RTEICT52294.2021.9573867.
- S. S. Kumar, R. Gatti, S. K. N. Kumar, N. Nataraja, R. P. Prasad and T. Sarala, "Glove Based Deaf-Dumb Sign Language Interpreter," 2021 International Conference on Recent Trends on Electronics, Information, Communication & Technology (RTEICT), 2021, pp. 947-950, doi: 10.1109/RTEICT52294.2021.9573990.

#### **National Conferences:**

- Ravi Gatti "Wireless Automated billing Machine using Zigbee" at Second International Conference on Network, Information and Communication (ICNIC-2015), 18th-20th May, 2015, SVCE, Bengaluru.
- Ravi Gatti, "Vehicular Emergency Rescue Dispatch System With early Warning and Post-Crash Analysis" at Second International Conference on Network, Information and Communication (ICNIC-2015), 18th-20th May, 2015, SVCE, Bengaluru.
- Ravi Gatti, "Student Monitoring System." at Second International Conference on Network, Information and Communication (ICNIC-2015), 18th-20th May, 2015, SVCE, Bengaluru.

#### **Conference Attended**

- Ravi Gatti, Emerging Trends in Electronics & Communication Engineering [Manthana'21], S. J. C. Institute of Technology (SJCIT), Chikkaballapur-562101, Karnataka, India. 28th August 2021

#### **Seminar Attended**

- Participated in Panel Discussion on NEP implementation in higher education, Organized Bhagirathi Bai Narayana Rao Maanay Institute of Technology, on 20<sup>th</sup> November, 2021
- Participated in 5-Day Webinar Series on "Design Thinking" organized by Department of Electronics and Communication Engineering, Sri Ramakrishna Institute of Technology, Coimbatore, conducted during 27th to 31st May 2020.
- Participated in Online Webinar on "Robotic Process Automation (RPA)-UI Path" Sponsored by All India Council for Technical Education (AICTE), New Delhi Under the scheme for Skill and Personality Development Programme (SPDP) Organized by Department of Electronics & Communication Engineering, Sri Venkateshwara College of Engineering Bengaluru-562157 Date: 03-05-2020.

#### **Workshop Attended**

- Participated in the AICTE Sponsored Short Term Training Program (STTP) under AQIS Programme on "Compressive Sensing Techniques for 5G Cellular Networks using MATLAB" from 22nd – 27th July 2020, Organised by Department of Electronics & Communication Engineering, Sri Venkateshwara College of Engineering, Bengaluru.

- Participated in 1-day workshop on “Introduction to Intellectual Property Rights and Indian Patenting System” in association with KSCST at Dept. of E&CE, 22 March, 2016, SVCE, Bangalore.
- Participated in a workshop on “Awareness on IPR for New Business Ideas & Schemes of MSME”, Technically sponsored by Ministry of MSME GOI, Bengaluru held on 06-08-2020 organized by Intellectual Property facilitation Centre (IPFC), Sri Venkateshwara College of Engineering, Bengaluru.

### **Patents published with All Details**

**Title:** Design and Development of Real Time Automated Routing Algorithm for Computer Networks.

Patent Number: 2021101685

Patent Grant on: 05/05/2021

Agency: Austrian IP

### **Student Project Funds Fetched with Grant No.**

- KARNATAKA STATE COUNCIL FOR SCIENCE AND TECHNOLOGY, 44<sup>th</sup> Series of Student Project Programme to the UG students for the Year 2020-21 “Design and Implementation of low-cost Ultra-Violet Sterilization Robot to Avoid Infection for Better Human Health Care Services to promote Atmanirbhar Bharat”
- VTU Sanction of Financial Assistance to the projects of UG students for the Year 2020-21 “Design and Implementation of low-cost Ultra-Violet Sterilization Robot for Better Human Health Care Services”.
- KARNATAKA STATE COUNCIL FOR SCIENCE AND TECHNOLOGY, 43<sup>th</sup> Series of Student Project Programme to the UG students for the Year 2019-20 “Design and Implementation of Vision Module for Visually Impaired People”
- KARNATAKA STATE COUNCIL FOR SCIENCE AND TECHNOLOGY, 41<sup>th</sup> Series of Student Project Programme to the UG students for the Year 2017-18 “Low-cost heart monitoring system using embedded system”.

### **Consultancy Amount Fetched with Details**

Worked as Project Assistance

Title of the Project: Intelligent Off Grid System for Energy Sustainable Village

Sponsored Agency: Department of Science & Technology, India

### **Awards and Achievements**

- Completed NPTEL Online Certificate course with silver elite on “Design Thinking” on August 2021.
- Completed NPTEL Online Certificate course on “Programming in C++” on September 2018
- Session Chair for the RTEICT-2021, 2020, 2019, 2018, 2017
- Local Organizing Chair for the RTEICT-2018, 2017, 2016.
- Local Organizing Chair for the ICNIC-2015, 2014.
- Received Best Paper Award in the ICNIC 2014.

### **Academic Activity**

- NBA
- NAAC

## Faculty Development Activity/Workshops

- Participated in 8 hours FDP on "Microsoft Azure Machine Learning and AI" organized by InfiSpark on 15th to 17th March 2022.
- Participated in 5 days FDP on "Digital VLSI Design and Verification" organized by Department of Electronics and Communication Engineering, Bangalore Institute of Technology on 23rd to 27th August 2021.
- Participated in 7 days FDP on "Recent advances in RF and Wireless Communication" organized by Department of Electronics and Communication Engineering, Ramaiah Institute of Technology on 2nd to 7th August 2021.
- Participated in AICTE Sponsored Short Term Training Program (STTP) under AQIS Programme on "Compressive Sensing Techniques for 5G Cellular Networks using MATLAB" from 22 – 27 July 2020, organised by the Department of Electronics & Communication Engineering, Sri Venkateshwara College of Engineering, Bengaluru.
- Participated & completed successfully AICTE Training and Learning (ATAL) Academy Online FDP on "Training for Social Connectedness & Inspiration" from 2020-12-14 to 2020-12-18 at Sri Venkateshwara College of Engineering, Bengaluru.
- Faculty Mentor for the DST & Texus Instruments India Innovation Challenge Design Contest 2019 powered by AICTE and anchored by NSRCEL@IIMB on 12 September, 2019.
- Participated in 7-Days "Faculty Development Program for Student Induction (FDP-SI)" during 23-29 July, 2019 at Sri Venkateshwara College of engineering, Bangalore organized by All India Council for Technical Education (AICTE).
- Participated in 3-Days "Faculty Development Program for Student Induction (FDP-SI)" Conducted by AICTE during 21-23 June, 2018 at Sri Venkateshwara college of Engineering, Bangalore.
- Participated in Five days Faculty Development Program "Sensor Networks and Internet of Things" in association with IEEE Computer Society and IETE at Dept. of E&CE, 29 December–2 January, 2017, SVCE, Bangalore.
- Participated in Faculty Development Program "Recent and Advanced Research work on Wireless Communication using C++ & Building TCL Scripts in NS2/3" at Dept. of E&CE, 20–25 July, 2015, SVCE, Bangalore.
- Participated in Faculty Development Program "Recent Issues and Developments in Wireless and Optical Fibre Communication" at Dept. of E&CE, 14–16 January, 2015, SVCE, Bengaluru.

## Contact Details

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