

B.V.V. Sangha's
Basaveshwar Engineering College, Bagalkote
Department of Electronics and Communication Engineering

RESEARCH CENTRE

DETAILS

I. About Research Centre:

Year of Establishment: **2005**

Major Research Areas:

1. Wireless Network

2. Speech Processing

3. MEMS

4. Image Processing

5. VLSI Signal Processing

No. of research guides enrolled at our research centre: **16**

No. of internal faculty guiding the candidates: **16**

Faculty with Ph.D. : 21

Our Faculty pursuing Ph.D.: 02

No. of candidates awarded Ph. D. till date: 29

No. of candidates pursuing Ph.D.: 20

II. Research Guides at the Research Centre

Sl.No.	Name of the Guide	Area of Specialization
1.	Dr. Shridhar S.K	Speech Processing
2.	Dr. JayashreeD. Mallapur	Wireless Networks
3.	Dr. P.N. Kulkarni	Speech Processing
4.	Dr. B.G. Sheeparamatti	MEMS, Embedded Systems
5.	Dr. A.V. Sutagundar	Wireless Networks
6.	Dr. Mahabaleshwar S.K.	Wireless Networks
7.	Dr. S. G. Kambalimath	VLSI and Signal Processing
8	Dr. Kiran Y. Bendigeri	Wireless Sensor Networks
9	Dr. Nagratna Rajoor	Wireless Sensor Networks
10	Dr. Mamata J. Sataraddi	Wireless Sensor Networks
11	Dr.Vijayalakshmi S. Jigajinni	Aerospace Engineering
12	Dr. Santosh Kumblawati	Wireless Sensor Networks
13	Dr. Rajani S. Pujar	Speech Processing
14	Dr. Kirankumar B. Balavalad	MEMS
15	Dr. Sharanappa P. H.	Internet of Things
16	Dr. Anand H Unnibhavi	Speech Processing

III. Research Scholars Pursuing Ph.D Program at the Research Center

Sl. No	Name of the Student	Name of the Guides	Year of Registration	Research Topic
01	Shreekant Salotagi 2BA18PEC01	Dr. Jayashree D.Mallapur	2018	Optimization of Resource Allocation in Internet of things Application
02	Mr. Adappa Angadi 2BA16PEJ04	Dr. Shridhar K.	2014	Efficient structures for speech enhancement
03	Mr.Sanjay Choudry 2BA17PEA08	Dr. Shridhar K.	2016	VLSI structures for speech enhancement
04	Mahaveer.J.Chougala 2BA18PEC04	Dr. Shridhar K.	2018	Speech enhancement using Transform Domain Techniques
05	Rashmi Yala 2BA17PEA06	Dr. Shridhar K.	2017	Speech Enhancement using Improved Speech estimation Techniques
06	Jyoti Katagi 2BA17PEA04	Dr. P.N.Kulkarni	2016	Effect of monaural and binaural hearing aids on source localization
07	Aparna Chilakawad 2BA18PEC03	Dr. P.N.Kulkarni	2017	Spectral Splitting of Speech signal to reduce effect of masking due to sensorinual using time varying filters for binaural dichotic presentation
08	Madhuri B Mulik 2BA16PEC01	Dr. P. N. Kulkarni	2016	Assessment of SAR Images for Climate Change Risk Detection using Image Processing Techniques with respect to Indian Scenario
09	Ujwala.Nandini 2BA18PEC02	Dr. B.G.Sheeparamatti	2018	Optimization of Micro pressure sensor for performance enhancement
10	Mallikarjun.Aralimarad 2BA13PE01	Dr. Meena.M.	2012	Vision based Human action recognition
11	Sunilkumar Hattaraki 2BA20PEC04	Dr. S. G. Kambalimath	2021	Automatic Detection of Listening Conditions and Adaptive Speech Signal Filtering in Hearing Aids
12	Vinodkumar M. Sonar 2BA20PEC06	Dr. S. G. Kambalimath	2021	AI based Programmable Digital Hearing AID
13	Achyut Yargal 2BA20PEC01	Dr. Kiran Y. Bendigeri	2021	IoT Data Aggregation for vertical and Horizontal with Edge Computing
14	Basavaraj S. Soratur 2BA21PEC01	Dr. Mahabaleshwar S.K.	May 15 2023	Design and Development of Contactless care system using RADAR Sensors for Differently abled and Geriatric People
15	Supriya Harlapur 2BA21PEC06	Dr. Mahabaleshwar S.K.	May 15 2023	Design and Development of Data Management Techniques in IoT

16	Benazir Hifzurrehman Muntasher 2BA22PEC03	Dr. Mahabaleshwar S.K.	February 1 2024	Efficient data security schemes for internet of medical things
17	B.M.Angadi 2BA17PEA03	Dr. Mahabaleshwar S.K.	2017	Sensor nodes localization clustering and routing algorithms for wireless sensor networks
18	Mallikarjun Deshamuk 2BA20PEC02	Dr. Santosh Kumblawati	2021	Optimizing Resorce Utliazation and Enchnancing Performanance of LTE Advance Communication System.
19	Sneha Kotin 2BA21PEC05	Dr. Ashok Sutagunder	2023	Design Simulation and Optimization of MEMS based thin films
20	Mallikarjun Aralimarad	Dr. Anand H Unnibhavi	2023	Development of effective speech recognition system and vocabulary building system for children with cochlear implants

IV. Ph.D`s awarded from the Research Centre

Sl. No.	Name of the Student	Name of the Guide	Title of the Thesis	Year of Degree Awarded
01	R.C.Biradar	Dr. S.S.Manvi	Reliable and QoS based multicast routing in mobile ad-Hoc network for group communication	2011
02	Nandini Sidnal	Dr. S.S.Manvi	Agent based auction services discovery in relevant auction identification and bidding in mobile e-commerce	2012
03	M.N.Birje	Dr. S.S.Manvi	Multi agent System based solutions to resolve sum of the issues in wireless mobile semantic grid	2012
04	Mahabaleshwar S.K	Dr. S.S.Manvi	Multiagent System based Safety Information Gathering Aggregation and Dissemination in Vehicular ad-Hoc Networks	2012
05	A.V.Sutagundar	Dr. S.S.Manvi	Multiagent System based Information Gathering , Fusion and Aggregation in Wireless Sensor networks	2013
06	Nagaratna.R	Dr. Jayashree D. Mallapur	An energy efficient time synchronization in wireless sensor networks	2018
07	S.K.Padaganur	Dr. Jayashree D.Mallapur	Topology scaling and resource allocation in heterogeneous wireless multimedia networks	2019
08	Rajani.S.Pujar	Dr. P.N.Kulkarni	Effect of Noise Reaction Algorithms in improving speech perception for monaural and binaural hearing aids	2020
09	Manjula Sutagundar	Dr. B.G. Sheeparamatti	Modeling , simulation and optimization micro resonator	2020
10	Ajayakumar C.Katageri	Dr. B.G. Sheeparamatti	Modeling and Simulation and fabrication of CNT based pizo resistive pressure sensor	2020
11	Kirankumar B.Balavalad	Dr. B.G. Sheeparamatti	Design, Modeling and simulation of highly sensitive piezoresistive pressure sensor the high temperature applications	2020
12	Basavaprabhu H	Dr. A.V. Sutagundar	Sensor node Deployment, Localization, Topology Control, and Routing Techniques for Underwater Acoustic Sensor Networks.	2020
13	Prashant Sangoli	Dr. A.V. Sutagundar	Multi-agent based fault tolerance, routing, information classification and resource management in sensor cloud	2020
14	Vidya Bennur	Dr. A.V. Sutagundar	Agent Based Localization, Fault tolerance and routing in wireless sensor network.	2021
15	Daneshwari Hatti	Dr. A.V. Sutagundar	Agent based Middleware for Resource Management in IoT	2021
16	Shiala Mudengudi	Dr. Mahabalesh S. K.	Intelligent security schemes for vehicular clouds networks	2021

17	Maheshwari Biradar	Dr. B.G. Sheeparamatti	Computer vision based fabric defect detection	2021
18	Mamata J. Sataraddi	Dr. Mahabalesh S. K.	Intelligent Routing Algorithms for Vehicle-to-Vehicle, Vehicle-to-Infrastructure and Hybrid Communications in VANETs	2021
19	Mahantesh G. Kambalimath	Dr. Mahabalesh S. K	Intelligent resource management schemes in vehicular cloud networks	2021
20	Somu Parande	Dr. Jayashree D. Mallapur	Flexible and Adaptable secured Routing for Real-Time Application in Wireless Sensor Networks	2022
21	Shivshankar Huddar	Dr. B.G.Sheeparamatti	Design and fabrication of cantilever based novel low actuation voltage RF MEMS switch	2022
22	Jadish Jakati	Dr. Shridhar S. K.	Speech Enhancement using Novel Time-Frequency Analysis Techniques	2022
23	Anand H Unnibhavi	Dr. Shridhar S. K.	Development of Continuous Speech Recognition System for Kannada Speech Recognition of Different Dialects	2022
24	Poornima Chanal 2BA17PEA05	Dr. Mahabaleshwar S.K.	Intelligent security and privacy schemes for IoT for internet of Things (IoT)	2022
25	Sharanappa P. H.	Dr. Mahabalesh S. K.	Intelligent Solution for Information Gathering, Validation and Aggregation in Internet of Things (IoT).	2022
26	Ramesh Koti 2BA16PEJ05	Dr. Mahabaleshwar S.K.	Design and development of intelligent safety information dissemination schemes in VANET	2022
27	Gururaj.S.Kori 2BA16PEJ02	Dr. Mahabaleshwar S.K.	Design and development of intelligent resource management schemes for wireless sensor networks	2022
28	Dr. Basavaraj Angadi	Dr. Mahabaleshwar S.K.	Sensor Nodes Localization, Clustering and Routing algorithms for Wireless Sensor Networks	2024
29	Dr. Shobha R. Bharamagoudar	Dr. S. V. Saboji	Routing System for Mobile Opportunistic Network using Microscopic and Macroscopic Schemes	2024

V. Research Projects Completed by the Department

Sl. No.	Title	Name of the Faculty	Funding Agency	Amount (in Lakhs)	Year
01	Microwave Communication Laboratory (Modrob)	Dr. S.G.Hiremath	AICTE	10	1992
02	Infrastructural facilities in Electronics (Area of Weakness)	Dr. S.G.Hiremath	AICTE	07	1992
03	Electronics and Communication Laboratory (ModRob)	Dr. S.G.Hiremath	AICTE	12	1993
04	Semiconductor Electronics and Digital Electronics (Thrust Area)	Dr. S.G.Hiremath	AICTE	08	1994
05	Centre for Electronic system Design Automation (Integrated scheme)	Dr. S.G.Hiremath	AICTE	15	1995
06	Modernization of Communication Laboratory	Prof. S.M.Iddalagi	AICTE	06	1998
07	Modernization of Electronic Design Automation Lab	Dr. S.G.Hiremath	AICTE	15	2002
08	QoS Support in mobile Communication Networks	Dr. S.S.Manvi	AICTE	7.57	2006
09	Design and Development of Fuzzy based Algorithms for Resource Allocation and Routing in wireless Network	Dr. Jayashree D.Mallapur	AICTE	09	2008
10	Speech Processing for Improving speech perception and production	Dr. P.N.Kulkarni	AICTE	5.50	2011
11	Design and Fabrication of low cost polymer micro cantilevers.	Dr. B.G. Sheeparmatti	AICTE	7.00	2012
12	Design and Development of Intelligent routing Algorithms for Vehicular Ad hoc Networks	Dr. M.S. Kakkasageri	VGST	4.00	2015
13	Sustainable Agriculture	Dr. K.Y. Bendigeri	DST	5.5	2016
14	Resource Management in Internet of Things	Dr.A.V. Sutagundar	AICTE	5.765	2017
15	Intelligent Authentication Scheme for Internet things	Prof. Poornima. Chanal	VGST	03	2020
16	Development and Characterization of microcantilever for chemical sensing	Dr. A.C.Katageri Dr. K.B.Balavalad	VTU	12	2021