



JSS Mahavidyapeetha

JSS Academy of Technical Education

Dr. Vishnuvardhan Road, Srinivasapura post Bangalore 560060

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FACULTY PROFILE

Department: Information Science & Engineering

1. Personal Details

NAME	Mrs. Mamatha G	
DEPARTMENT	Information Science & Engineering	
DESIGNATION	Assistant Professor	
PHONE	+91 99800 05121	
EMAIL ID	mamathag@jssateb.ac.in	
Date of Joining (JSSATEB)	20-09-1999	

2. Experience

Total Experience in Years	Teaching: 26 Years	Industry: Nil	Research: 15 Years
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3. Qualifications

COURSE	SPECIALIZATION	Year of Award	INSTITUTION	UNIVERSITY
B.E	Computer Science and Engineering	1996	Siddaganga Institute of Technology, Tumkur, Karnataka, INDIA	Bangalore University, Karnataka
M Tech.	Computer Network Engineering	2007	BMS College of Engineering, Bengaluru, Karnataka, INDIA	Visvesvaraya Technological University, Belagavi, Karnataka
Ph.D.	Algorithm Acceleration	pursuing	Dept. of CSE, BMS College of Engineering, Bengaluru, Karnataka, INDIA	Visvesvaraya Technological University, Belagavi, Karnataka

4. Research & Publications

Papers Published in Journals	International: 08	National: -
Papers Presented in Conferences / Symposium	International: 03	National: 06
Book chapters Published	01	
CRC Press - Engineering Science and Technology: Innovations for the Future, 2025, "AI-driven urban resilience system: Tackling urban flooding, rescue optimization, and heat island mitigation", doi: 10.1201/9781003685876-11		

Grants

i. Funds Received (Projects)

Project Name	Grant Amount	Date of receiving the Grant	Duration	Grant issuing authority/ Body / Organization
Empowering Rural Dairy Farming: Automation for Indian Cattle Herders	Rs. 4,500	19/ 04/ 2024	4 months	Karnataka State Council for Science and Technology (KSCST)

5. Awards Received

Best Project award	Urban Resilience System - Flood prediction and Heat map Islands at Open Day – 2025, JSSATE, Bengaluru
Best Paper award	AI-Powered Resilience System for Urban Flood Mitigation and Heat Climate Adaptation: A Review, at 11 th National conference, NCAIT- 2025
Best Paper award	“A phase shift of Recruitment system to Online” at National conference, NCAIT- 2023
Best Paper award	“Speech Emotion Recognition and Implementation: A Survey”, at National conference, NCAIT- 2022

6. Publications

i. International Journals

Sl. No.	Title of the paper	Name(s) of Author(s)	Name of the Journal	Volume No. Issue No. Year	WOS / Scopus / Both	Impact Factor	Publisher
1.	Chatgpt: An Ultimate Driving Companion: Systematic Review	Ananya Sadananda Gowda, Mamatha G	International Journal of Creative Research Thoughts (IJCRT)	ISSN: 2320-2882, Volume 13, Issue 7, July 2025	UGC	7.97	IJCRT
2.	Prototype Pollution Detection for Node.Js Applications: A Review	Mamatha G; Nitya N Hegde	MAT Journals: Journal of Cyber Security, Privacy Issues and Challenges	Vol 3, pg 23-32, e-ISSN: 2583-7656, 2024			MAT Journals:
3.	A Comprehensive Review on Digital Twin Applications in Healthcare System	Mamatha G; Aditya T Rathod	MAT Journals: Journal of Big Data Technology and Business Analytics	Vol 3, pg 31-42, e-ISSN: 2583-7834, 2024			MAT Journals:
4.	Review on Technology Advancements in Biometric Authentication	Mamatha G; Sinchana Divakar Goudar	MAT Journals: Journal of Information Security System and Cyber Criminology Research	Vol 1, Issue 1, pg 8-19, 2024			MAT Journals:
5.	Review on AI-Driven Automation for Autonomous Vehicles	Mamatha G; Neha Subrahmanya Hegde	MAT Journals: Recent Trends in Artificial Intelligence & It's Applications,	Vol 3, Issue 1, pg 19-28, e-ISSN: 2583-4819, 2024			MAT Journals:
6.	“IoT for Crop	P L Asriitha,	JSS Journal of	Vol 2, Issue			J-JSS

	Monitoring: a systematic review”	Mamatha G, A Surendra Badiger, Seema Reddy, Jayanth M	Scientific Studies,	1, pg 56- 61, ISSN 2583-5815 Aug'2023,			
7.	“Implementation of NoSQL in Big Data Marts”	Khushi Jain, Mamatha G	JSS Journal of Scientific Studies,	Vol 2, Issue 1, pg 67- 71, ISSN 2583-5815 Aug'2023			J-JSS
8.	“Design approaches for Obstacle Avoiding Rectilinear Steiner Minimum Tree: A comparative study”	Mamatha G	International Journal of Advanced Research in Computer and Communication Engineering (IJARCCE)	ISSN (Online) 2278-1021, ISSN (Print) 2319-5940, Volume 4, Issue 4, April 2015	-	4.582	IJARCCE

ii. Conferences

Sl. No.	Title of the paper	Name(s) of Author(s)	Name of the Conference/ Journal	Volume No. Issue No. Year	WOS / Scopus	Impact Factor	Publisher
1.	CHATGPT: Our Driving Partner- A Systematic Review and Implementation	Ananya Sadananda Gowda, Mamatha G	IEEE International Conference on Electronics, Computing and Communication Technologies (CONECCT-2025)	pp. 1-6, doi: 10.1109/CONECCT65861.2025.11306535	Scopus		IEEE
2.	AI-Powered Resilience System for Urban Flood Mitigation and Heat Climate Adaptation: A Review	Shreya Gore, Satwik G.Vaidya, Rachana Deepak Kadkol, G. Mamatha	11th National Conference on Advancements in Information Technology (NCAIT 2025)	JSS Journal of Scientific Studies, (JSS-JSS) ISSN: 2583-5815			J-JSS
3.	“Speech Emotion Recognition and Implementation: A Survey”	Varshitha M S, Mamatha G,	NCAIT – 2022, proceeding in International Journal of Engineering Science Invention (IJESI)	2022, PP. 87-91, ISSN (Online): 2319 – 6734, ISSN (Print): 2319 – 6726			IJESI
4.	“Facial Emotion Recognition and Implementation: A Survey “	Yashaswini K, Mamatha G	NCAIT – 2022, proceeding in International Journal of Engineering Science Invention (IJESI)	2022, PP. 39-44, ISSN (Online): 2319 – 6734, ISSN (Print): 2319 – 6727			IJESI
5.	“Prospects of Convolutional Neural Networks: A study”	Jeevan G V, Mamatha G	NCAIT – 2022, proceeding in International Journal of	2022, PP. 96-103, ISSN (Online): 2319 –			IJESI

			Engineering Science Invention (JESI)	6734, ISSN (Print): 2319 – 6728			
6.	“Detection methods for COVID-19 in Nasal Swab samples: A study”,	Bhagyashree Biradar, Mamatha G	NCAIT – 2022, proceeding in International Journal of Engineering Science Invention (JESI)	2022, PP. 144-151, ISSN (Online): 2319 – 6734, ISSN (Print): 2319 – 6729			IJESI
7.	“Study on IoT Embedded Wheelchair Module Using Eyeblinks”,	Amrutha G Upadhya, BG. Nayana, Dr. K. N. Sowmya, G. Mamatha	NCAIT – 2021, proceeding in CiiT International Journal of Automation and Autonomous System,	Vol 13, No 2, April - June 2021			CiiT
8.	“Smart Glove for the Disabled: A Survey”,	Hrishikesh P Athreya, G. Mamatha, R. Manasa, Subhash Raj, R. Yashwanth,	NCAIT – 2021, proceeding in CiiT International Journal of Programmable Device Circuits and Systems,	Vol 13, No 2, February 2021			CiiT
9.	“Smart Vehicular Communication: A Survey”	Sharan H S, Mamatha G, Prajwal U, Prathik R, Priya D S	NCAIT – 2020, proceeding in International Journal of Engineering Research & Technology (IJERT)	, Volume 8, Issue 15, 21-09-2020 ISSN (Online) : 2278-0181	-	7.87	IJERT
10.	“Smart Vehicular communication for Road status analysis and Vehicle trajectory prediction”	Sharan H S, Mamatha G, Prajwal U, Prathik R, Priya D S	2020, Third International Conference on Smart Systems and Inventive Technology (ICSSIT), Tirunelveli, India	Oct 2020, INSPEC Accession no: 20032375 DOI: 10.1109/ICSSIT48917.2020.9214252	Scopus		IEEE
11.	“Universal Semantic Web Assistant based on Sequence to Sequence Model and Natural Language Understanding”	S.V Prajwal, Mamatha G, Ravi P, D Manoj, Shri Krishna Joisa	2019, 9th International Conference on Advances in Computing and Communication (ICACC), Kochi, India	Feb 2020, pp. 110-115, doi: 10.1109/ICACC48162.2019.8986173.	Scopus		IEEE

7. Workshops / Conference (Organized)

Sl. No.	Name of the workshop / Conference	Organiser	Date	Role
1.	Industrial visit to ISRO	Dept. of ISE, JSSATE, Bengaluru	2 nd Nov 2016	Program Coordinator
2.	Expert talk, "Entrepreneurial Motivation for ISE students ", Prof. Nanda Gopal, Chief Executive, Innovation & Incubation Center, JSSATE, Bengaluru	Dept. of ISE, JSSATE, Bengaluru	7 th Mar 2017	Program Coordinator
3.	Technical talk, "Mobile communication & 5G Evolution" , Sridhar T.R, Senior Product Line Manager, M/s VMWare, Bengaluru.	Dept. of ISE, JSSATE, Bengaluru	6 th Mar 2019	Program Coordinator
4.	Technical talk, "Evolution of Virtualization Technology and its future", Bharath M.B, Sr. Principal Solution Architect, M/s Dell EMC, Bangalore.	Dept. of ISE, JSSATE, Bengaluru	5 th May 2019	Program Coordinator
5.	3 rd National Conference on Advancements in Information & Technology (NCAIT-2017)	Dept. of ISE, JSSATE, Bengaluru	19 th , 20 th May 2017, (2 days)	Program Coordinator
6.	Technical talk, "Power of Computer Networking", Ms. Aishwarya, Software Engineer, M/s Ruckus Networks, Bengaluru	Dept. of ISE, JSSATE, Bengaluru	20 th Feb 2020	Program Coordinator
7.	Webinar ,"Java full stack application development" , Mr. VIKAS, Lead Technical Specialist, M/s Technoserve India	Dept. of ISE, JSSATE, Bengaluru	10 th Dec 2021	Program Coordinator
8.	Workshop, "Introduction to Cyber Security", Mr. Ajay Ganapule, Program Manager, M/s Tata Consultancy Services, Bengaluru.	Dept. of ISE, JSSATE, Bengaluru	15 th July 2022	Program Coordinator
9.	Workshop on "NodeJS and ReactJS" by Mr. Pawan Ranjit, Associate Software Engineer, M/s J P Morgan Chase, Bengaluru,	Dept. of ISE, JSSATE, Bengaluru	23 rd July 2022	Program Coordinator
10.	Webinar on "Internet under the hood: Linux Kernel" by Ms. Aishwarya Ganesh Graduate Research Assistant, University of Illinois, Chicago, United States of America, Alumni of ISE Dept. 2017-batch	Dept. of ISE, JSSATE, Bengaluru	12 th Dec 2022	Program Coordinator
11.	Technical Talk on "Automation and Manual – Combinational Software Testing" by Ms. Ayesha M , Software Test Engineer, at M/s Capgemini, Bengaluru, Alumni of ISE dept 2021-batch	Dept. of ISE, JSSATE, Bengaluru	10 th Dec 2022	Program Coordinator
12.	IEEE, 4 rd International conference on "Cognitive Computing and Information Processing" (CCIP-2022)	Dept. of ISE, JSSATE, Bengaluru.	22, 23 Dec 2022 (2 days)	Finance chair
13.	"A Walkthrough - Software Testing Levels and Selenium tool" , Ms. Ayesha M , Software Test Engineer, M/s Capgemini, Bengaluru,	Dept. of ISE, JSSATE, Bengaluru	17/06/2023.	Program Coordinator
14.	Project training Visit to, State Livestock Breeding and Training Centre (SLBTC), Hesaraghatta, Bengaluru	Dept. of ISE, JSSATE, Bengaluru	03/ 06/ 2024	Program Coordinator

8. Workshops /Conferences Attended

Sl. no.	Name of the workshop / Conference	Organizer	Date
1.	ATAL - FDP online, Next GEN Computing HPC, AI & Quantum Technologies	G L BAJAJ GROUP OF INSTITUTIONS, Mathura	09/02/2026 to 14/02/2026.
2.	ATAL FDP on, Advancements in Semiconductors, System software and AI for Digital Agriculture	JSSATE, Bengaluru	08 to 20/9/2025,
3.	2 weeks, online FDP on, Bootcamp on Big Data Data Science,	Organiser - C-DAC, NOIDA in association with RV University, as part of Future Skills PRIME Project.	21/07/2025 to 01/08/2025 ,
4.	2 weeks FDP on, "Recent Advances in Bioelectronics and Energy Materials for Healthcare and Sustainable Development",	organized by Electronics and ICT Academy, NIT Patna,(Phase-II) by the MeitY, Gol	21st - 31st July, 2025.
5.	FDP on "Artificial intelligence and emerging technologies"	JSSTU, Mysuru	18-22, March 2025,
6.	Online FDP on "Blockchain & Web3"	Srinivas Institute of Technology, Mangalore, Karnataka in Collaboration with ExcelR Edtech	10th to 17th Mar 2025
7.	online course , "Overview of Geographical Information System"	conducted by IIRS-ISRO Dehardun India.	14th Oct to 1st Nov 2024
8.	online course on, "Overview of Global Navigation Satellite System"	conducted by IIRS-ISRO Dehardun India	23 Sep to 04 Oct 2024
9.	4-weeks Technology Entrepreneurship Development Program on "IoT Embedded Systems & AI,"	conducted by the JSSATE STEP, Bengaluru, sponsored by NSTEDB, Department of Science & Technology, Govt. of India online mode	4th to 29th March 2024
10.	3-week, Women Entrepreneurship Development Program (WEDP), "Sustainable & Eco-friendly products, Digital & E-commerce Businesses,"	sponsored by NSTEDB, Department of Science & Technology, Govt. of India, organizer JSSATEB STEP, online mode	7th – 24th Feb 2024,
11.	One Week National Level Faculty Development Programme on "Statistical and Probability Insights for Data Science: Applications and Use cases"	Dept of Information Technology,Vardhaman College of Engineering, Hyderabad.	06th to 10th November 2023
12.	training in Building Advanced Data Analytics Applications with Cloud	AICTE-TLB FDP part of the Next Gen Employability Program. in collaboration between the Edunet Foundation and EY GDS (Ernst & Young),	25/09/2023 29/09/2023.
13.	AICTE-VTU Joint Teachers Training Programme on "Fundamentals of Data Science & Analytics"	AICTE-VTU Joint Teachers Training Programme	05th to 09th June 2023
14.	AICTE-VTU Joint Teachers Training Programme on "Introduction to Python Programming & its Applications"	AICTE-VTU Joint Teachers Training Programme	19th to 23rd June 2023
15.	AICTE-VTU Joint Teachers Training Programme on "Smart Materials & Systems"	AICTE-VTU Joint Teachers Training Programme	29th May to 2nd June 2023

16.	AICTE-VTU Joint Teachers Training Programme on ""Introduction to Cyber Security"	AICTE-VTU Joint Teachers Training Programme	22nd to 26th May 2023
17.	AICTE-VTU Joint Teachers Training Programme on "Robotics & Artificial Intelligence",	AICTE-VTU Joint Teachers Training Programme	24-28 Apr 2023 5 days
18.	STC on "IoT Basics"	NITTTTR Chandigarh	24- 28 Apr 2023 5 days
19.	AICTE-VTU Joint Teachers Training Programme on "Introduction to Internet of Things",	AICTE-VTU Joint Teachers Training Programme	17-21 Apr 2023 5 days
20.	AICTE-VTU Joint Teachers Training Programme on "Introduction to Web Programming",	AICTE-VTU Joint Teachers Training Programme	27-31 Mar 2023 5 days
21.	AICTE-VTU Joint Teachers Training Programme on "Introduction to Python Programming & its Applications",	AICTE-VTU Joint Teachers Training Program	13-17 Mar 2023 5 days
22.	4 th International conference on "Cognitive Computing and Information Processing" (CCIP-2022)	Dept. of ISE, JSSATE, Bengaluru. In association with IEEE	22, 23 Dec 2022 (2 days)
23.	National Webinar on "Industrial Design Drafting and Prior Art Searching for Design"	organized by Dept of Physics, JSSATE, Noida.	20th Oct 2022
24.	5 days FDP, "Advanced Tools and Techniques for Best Research" , online mode	organized by Dept. of ISE and IPR-Cell, RVITM, Bengaluru.	26th to 30th Sep 2022,
25.	1 week FDP, "Geospatial Analytics", online mode	organized by Dept. of Civil Engg, JSSATE, Bengaluru, in association with KSTA, DST, GoK	26th to 30th Sep 2022,
26.	5 Days FDP, "Intellectual Property Rights"	organized by JSSATE, Bangalore in collaboration with CIPAM, DPIIT, Ministry of Commerce and Industries, GoI	12th to 16th Sep 2022
27.	1 day FDP, "NEP 2020-Touching the Iceberg"	organized by Dept of MBA, JSSATE, Bengaluru	9th Sep 2022
28.	1 week FDP, "Amazon Web Services", online mode	Organized by RVITM, Bangalore, in collaboration with Brainovision Soln India Pvt.Ltd & AICTE	22nd to 27th Aug 2022,
29.	2 weeks, FDP, "Opportunities and challenges in entrepreneurship", online mode	organizer- STEP, CIR of JSSATE, Bengaluru	18th to 31st July 2022,
30.	national webinar, "Nano and Bio-interfaces with Improved Functionality"	By Department Of Chemistry, JSS Academy of Technical Education, NOIDA	on 10 June 2022.
31.	National Webinar on "Molecules to Devices: Organic Electronics - Photovoltaic and Sensors"	By Department Of Chemistry, JSS Academy of Technical Education, NOIDA	11 June 2022
32.	FDP /STC on Cryptography for information security	NITTTTR, Chandigarh	9/5/2022 to 13/5/2022
33.	FDP /STC on Cyber Crime and Forensic Tools	NITTTTR Chandigarh	23/5/2022 to 27/5/2022
34.	FDP (Online), "ICT Tools for Innovative Teaching & Learning Process"	by, Dept of ISE, R.V Institute of Technology and Management, Bengaluru,	28th Mar - 1st April,2022.
35.	IP Awareness/Training program (online)	Intellectual Property Office, India	February

			10,2022
36.	FDP, "Research Publication"	JSSSTU, JSS Centre for management studies	20/1/2022 to 21/1/2022
37.	Elementary FDP on "Art and Drama in Education"	Government Brennen College of Teacher Education, Thalassery.	27/12/2021 to 31/12/2021
38.	FDP on "Parallel Algorithms for Computational Biology"	Maulana Azad National Institute of Technology Bhopal. Academy Online Elementary	06/12/2021 to 10/12/2021
39.	Training program, "Data Analytics suite-Optimizer B11i"	Dept. of IEM, JSSATEB in association with M/s Vallika Technologies, Bengaluru	26 th – 29 th Nov 2021 (3 days)
40.	Online FDP, "Industrial Internet of Things (IIOT) and Transition to Internet of Brains (IOB)", at Don Bosco Institute of Technology, Bengaluru	AICTE Training And Learning (ATAL) Academy, New Delhi	20 th – 24 th sep 2021, 1 week
41.	Online FDP, "Leadership and Teamwork for Education Excellence", at Central University of Haryana.	AICTE Training And Learning (ATAL) Academy, New Delhi	6 th – 10 th sep 2021, 1 week
42.	FDP, "Opportunities and challenges in Entrepreneurship"	sponsored by NSTEDB Dept. of Science & Technology, and JSSATE, Bengaluru	15 th - 27 th Mar 2021, 2-weeks
43.	Online Short Term Training Programme (STTP), "Research perspectives & Sustainable applications of Artificial Intelligence in Electrical Engineering"	AICTE Training And Learning (ATAL) Academy, New Delhi", at Francis Xavier Engineering College, Tirunelveli	21 st - 26 th sep 2020, 1 week
44.	Webinar, "Scientific writing for Journals"	Springer Nature, with VTU consortium, Belagavi,	30 th Sep 2020
45.	Online FDP, "Electric Vehicles", at PSG College of Technology, Coimbatore	AICTE Training And Learning (ATAL) Academy, New Delhi	2020-8-24 to 2020-8-28, 1 week
46.	Online FDP, "Sensors Technology" at St. Joseph's Institute of Technology, Chennai	AICTE Training And Learning (ATAL) Academy, New Delhi	2020-8-17 to 2020-8-21, 1 week
47.	Online workshop, "Redefining customer experience with Augmented Reality (AR) and Virtual Reality (VR) "	TEQIP- III, Dept. of ISE, PES college of Engineering, Mandya	Aug 17- 21 2020, 1 week
48.	Webinar , "Applications of Geo-informatics", by Karnataka Science and Technology Academy (KSTA) Department of Science and Technology,	Govt. of Karnataka & Regional Remote Sensing Centre (South), ISRO, Bengaluru	July 14 - 16, 2020, 3- Days Workshop
49.	Online FDP, "Cyber Security" at BMS Institute of Technology and Management, Bengaluru	AICTE Training And Learning (ATAL) Academy, New Delhi	2020-9-7 to 2020-9-11, 1 week
50.	3 rd International conference on "Cognitive Computing and Information Processing" (CCIP-2017)	Dept. of CSE/ISE, JSSATE, Bengaluru. In association with Springer India	15 th , 16 th Dec 2017 (2 days)

9. Details of NPTEL / COURSERA courses completed

Sl. No.	Name of the subject	Organised by	Date of completion / Award	Grade / Marks
1	"Computer Network & Internet Protocol", (12 weeks)	NPTEL, SWAYAM platform (swayam.gov.in)	Jan- Apr 2020	94%
2	"Theory of Computation", (08 weeks)	NPTEL, SWAYAM platform (swayam.gov.in)	Jul- Sep 2019	45%

10. Membership of Professional Bodies:

1. Indian Society for Technical Education (LM- ISTE)
2. Computer Society of India (LM- CSI)
3. International Association of Engineers (member-IAENG)

11. Any other information you like to share about your professional experience

- Worked as Coordinator for, National Board of Accreditation (NBA), NAAC, QS I-Gauge, ARIIA
- Paper-Reviewer at, IEEE Conference, ICRAIS-2024, MIT, Manipal; AIDE – 2025, NMAMIT Nitte.
- Attended/ organized, Training programs/ SDP/ short term course/ FDPs, to keep in phase with changing technology/ curriculum
- Guided UG students to obtain Project grants (KSCST), to publish, Main project paper in Journal/ Conference

Mrs. Mamatha G
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