



Malnad College of Engineering, Hassan

(An Autonomous Institute, Affiliated to V.T.U, Belagavi)

Faculty Biodata

GENERAL INFORMATION AND ACADEMIC BACKGROUND

PART-A

1.	Name	Dr. Swathi H Y
2.	Qualification	BE., M.Tech., PhD
3.	Date of joining the service at MCE	09-11-2016
4.	Department	CSE (AI&ML)
5.	Current Designation & Experience in MCE	Associate Professor & 9 Years
6.	Teaching Experience: P.G. (in Years) : U.G. (in Years) :	- 15 Years

Research Experience (in Years)

7.	a) Total Number of years b) Years spent in M. Phil. / Ph.D. c) Years of Guiding Ph.D. / M. Phil. d) Total No. of papers Published in i. International Journals ii. National Journals iii. Conference Proceedings e) Total No. of Conferences/Seminar/Workshop Attended i. International ii. National iii. State Level	8 Years 6.5 Years - 6 - 8 8 12 13
8.	Awards /Prizes/ Honor's / Recognitions	1. Best paper award for the paper titled “Hybrid Feature-Assisted Neural Model for Crowd Behavior Analysis” presented at 2 nd International Conference on Adaptive Computational Intelligence (ICACI-2020) organized by GSSS Institute of Engineering and Technology for Women, Mysuru on 15 th and 16 th December 2020. 2. Won Grand Challenge Scheme Grant organized by Centre of Excellence (CoE) in IIoT Sensors, Kerala Technology

		Innovation Zone, Kochi, and Ministry of Electronics and Information Technology, Govt. of India for the project “Optical cavity design with ray or beam path simulation and prototyping for optical based sensors for Environmental/Air Quality Monitoring”
9.	Fields of Specialization under the Subject / Discipline	Image Processing, Computer Vision, Artificial Intelligence and Machine Learning
10.	Orientation/Refresher Course/Summer School / Winter School/Workshops attended:	25

Orientation/Refresher Course/Summer School / Winter School/Workshops attended:

Sl. No.	Name of Course/Summer/Winter School	Place	Duration	Sponsoring Agency
1.	AI-Powered Cyber Threat Intelligence: The Role of Generative AI in Modern Security	Swarnandhra College Of Engineering & Technology, Andhra Pradesh	18 th to 23 rd August 2025	AICTE
2.	Machine Learning Lab	Certisured in association with Sai Vidya Institute of Technology	5 th to 8 th February 2025	VTU
3.	Generative AI and Advanced Tools for Academic Research	Scrollwell	04 th to 10 th November, 2024	Scrollwell
4.	Scaling New Heights: A Comprehensive Training Programme to Enhance Overall Institutional Diligence	Department of Mechanical Engineering and Civil Engineering, MCE, Hassan	20 th September 2024	MCE, Hassan
5.	Data Analytics and Visualization with Power BI and Tableau	Department of Information Science and Engineering, CMRIT, Bangalore	9 th – 13 th September 2024	CMRIT, Bangalore
6.	TECHEXPERIENCE “Chips Clouds and Everything in Between	Department of Electronics and Communication Engineering, MCE, Hassan in association with ME-RIISE	20 th May 2023	MCE, Hassan
7.	Research Conclave	IEEE Circuits and Systems Society, Bangalore Chapter in association with Department of Computer Science and Engineering, MCE, Hassan	26 th November 2022	IEEE and MCE

8.	Design Thinking and Prototyping in AICTE IDEA LAB	AICTE IDEA Lab, MCE, Hassan	21 st to 29 th October 2022	AICTE
9.	Advanced CNC Facilities	AICTE IDEA Lab, MCE, Hassan	11 th to 15 th June 2022	AICTE
10.	Quantum and Photonics	MCE, Hassan	29 th November to 3 rd December 2021	AICTE
11.	Computer Science and Biology	MCE, Hassan	19 th to 23 rd January 2021	AICTE
12.	Inculcating Universal Values in Technical Education	AICTE	5 th to 9 th October 2020	AICTE
13.	Optimization Techniques for Machine Learning	Department of Electronics and Communication Engineering, SJBIT, Bengaluru	10 th to 15 th August 2020	SJBIT
14.	Green, Smart, 5G Technologies	Department of Electronics and Communication Engineering, MCE, Hassan	9 th to 21 st December 2019	AICTE
15.	Feel Teacher – Developing, Counselling, Mentoring	MCE, Hassan	2 nd November 2019	MCE, Hassan
16.	Gaining Insight into Data Science and Data Analytics	MCE, Hassan	15 th to 27 th July 2019	AICTE
17.	Training the Proctors for Effective Mentoring	MCE, Hassan	23 rd March 2019	TEQIP-III
18.	Outcome Based Education (OBE)	MCE, Hassan	4 th and 5 th August 2018	TEQIP-III
19.	MEMS & MOEMS	MCE, Hassan	4 th and 5 th August 2018	TEQIP-III
20.	Image Processing and Pattern Recognition Techniques	MCE, Hassan	24 th to 26 th of March 2017	TEQIP-III
21.	Hands on training on Cadence VLSI design tool	MCE, Hassan	18th to 19th of March 2017	TEQIP-III
22.	Innovative Teaching Methodologies	MCE, Hassan	10th to 12th March 2017	TEQIP-III
23.	Virtual Laboratory	MCE, Hassan	16th February 2017	TEQIP-III
24.	Linear algebra and its applications	MCE, Hassan	2nd and 3rd December 2016	TEQIP-III
25.	Digital Signal, Image Processing and Pattern Recognition using SCILAB	PES University, Bengaluru	27th to 29th September 2016	PES University

PART-B

1. List of Publications:

Sl. No.	Title	Name of the Journal, Vol. No., Year	ISSN/ISBN/Number
1.	VertexML: A Survey	International Conference on Emerging Technologies for Multidisciplinary Innovation and Sustainability 2025	
2.	Enhanced diabetes prediction using skip-gated recurrent unit with gradient clipping approach	Frontiers Endocrinology, 15, 2025	1664-2392
3.	Dual Strategy Based Improved Swarm Intelligence and Stacked LSTM With Residual Connection for Land Use Land Cover Classification	IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 18, 2025	2151-1535
4.	Audio-visual multi-modality driven hybrid feature learning model for crowd analysis and classification	Mathematical Biosciences and Engineering, 20(7), 2023	15471063
5.	Hybrid Feature-Assisted Neural Model for Crowd Behavior Analysis	SN COMPUTER SCIENCE, 2, 2021	26618907
6.	A Survey on IOT-Middleware and Image Processing	1st International Conference on Advances in Information Technology (ICAIT-2019)	
7.	Inter - departmental Student Projects Challenges and Benefits	Journal of Engineering Education Transformations, 31, 2018	2394 - 1707
8.	Exemplary Faculty Mentoring Programme	Journal of Engineering Education Transformations, 31, 2018	2394 - 1707
9.	Inter - departmental Student Projects: Challenges and Benefits		
10.	Crowd Behavior Analysis: A survey	1st International Conference on Recent Advances in Electronics and Communication Technology (ICRAECT) 2017	978-1-5090-6701-5
11.	A Guide to Grant Proposal Writing	4th International Conference on Transformations in Engineering Education	6th to 8th January 2017

12.	Efficient filter construction for access control in firewalls	ISRASE, 2014	978-93- 83083-89-3
13.	Evaluation of Performance Dependency of MPI and PVM Based Parallel Applications on Broadcast Operation	International Conference on Advanced Computer Theory and Engineering (ICACTE 2014)	978-3-643-24819
14.	Performance Evaluation of Secured Cooperating Routing Protocol in CR- Ad-Hoc Networks	6th National Conference on Recent Trends in Electronics and Communication Engineering, 2014	
15.	Heuristics Based Optimal Filtering of Malicious Traffic	6th National Conference on Recent Trends in Electronics and Communication Engineering, 2014	

2. **Responsibilities in the Department and Institute / University:** (DAC,DPC, BOS, BOE etc., Institutional Governance responsibilities like, Dean, Chief warden, Warden, HOD's, School/Centre Chairperson, IQAC Coordinator etc.)

Sl. No	Responsibilities
1.	BOE, Chairman
2.	IQAC Coordinator
3.	NBA Coordinator
4.	Project Coordinator

3. **Details of Teaching Related Activities**

Sl. No.	Academic Year	(B. E/M.Tech)	Course Title
1.	20223-24	BE	UHV
2.	2024-25 (Odd)	BE	Digital Design and Computer Organization
3.	2024-25 (Odd)	BE	Introduction to Artificial Intelligence
4.	2024-25 (Odd)	BE	Introduction to Neural Networks
5.	2024-25 (Even)	BE	Machine Learning
6.	2024-25 (Even)	BE	Image Processing and Computer Vision
7.	2025-26 (Odd)	BE	Introduction to Neural Networks
8.	2025-26 (Odd)	BE	Machine Learning for Cyber Security