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	Dr. Basamma Umesh Patil
DEPARTMENT	Information Science & Engineering
DESIGNATION	Assistant Professor
PHONE	9611807733
EMAIL ID	patilbu@jssateb.ac.in
Date of Joining (JSSATEB)	06-11-2023

2. Experience

Total Experience in Years	Teaching: 13.2 Years	Research: 7 Years

3. Qualifications

COURSES	SPECIALIZATION	Year of Award	INSTITUTION	UNIVERSITY
BE	ISE	2009	Basaveshwar Engineering College, Bagalkote.	Visvesvaraya Technological University, Belagavi, Karnataka.
M.Tech	CSE	2014	MSEC, Bengaluru.	Visvesvaraya Technological University, Belagavi, Karnataka.
PhD	CSE	2024	JSS Academy of Technical Education, Bengaluru.	Visvesvaraya Technological University, Belagavi, Karnataka.

4. Research & Publications

Papers Published in Web of Science indexed Journals	International: 03	National: --
Papers Published in SCOPUS-indexed Journals	International: 05	National: --
Papers Published in Other Journals	International: 05	National: --
Papers Presented in Conferences / Symposium	International: 04	National: 05
Book Chapters Published	**Title:** Liquefied Petroleum Gas Level Monitoring and Leakage Detection Using Internet of Things **Authors:** D V Ashoka, Basamma Umesh Patil, R Chetan, Prakash B V Ajay **Name of the Book:** Society 5.0 and the Future of Emerging Computational Technologies **Publisher:** Taylor and Francis **Year of Publication:**2022	

5. Patents

Sl. No.	Title Details	Details of Award of Patents
1.	Rotating Bird Feeder.	Patent Number: 202111009493 A Patent published date: 12th March 2021

6. Funded Projects

Sl. No.	Title of the project (pl. mention your role as PI or Co-PI)	Funding agency & scheme	Date of approval of the project	Fund amount (Rs.) approved	Status of the project (ongoing /completed)
1.	Advanced Faculty Development Programme on Cybersecurity: AI-Driven Threat Intelligence and Secure Digital Infrastructure. (PI)	VGST-FDP	-	₹3,00,000	Proposal Submitted on 16th January 2026

7. Awards Received

1	Received the Best Paper Award for the paper titled "Deep Learning with Multimodal Fusion for Enhanced Human Activity Recognition" at SWSIoT-2025, organized by City Engineering College, Bengaluru, in association with Springer, September 2025.
2	Received the Best Paper Award for the paper titled "AI-Powered Genetic Inheritance Analysis Tool:GeneVision" at the National Conference on Advancements in Information Technology (NCAIT) 2025, JSSATE, Bengaluru, May 2025.
3	Received certificate of appreciation for being the session chair at the First International Conference on CICCS-2025, organized by JSSATE, Bengaluru, in collaboration with IIT Guwahati and the IEEE Bangalore Section.
4	Received certificate of appreciation for being an Evaluator for JSS Navotthana, a 24-hour Hackathon conducted during the AIKYAM Event 2025 at JSSATE, Bengaluru.

8. Publications

i. International Journals

Sl. No.	Title of the Paper	Names(s) of Author(s)	Name of the Journal	Volume No. Issue No. Year	WOS/ Scopus/ Others	Impact Factor	Publisher
1	Trinet-Har: A Trimodal Framework For Human Activity Recognition	Basamma Umesh Patil, Chetan R, D V Ashoka, Ashok V S, Nagamani H S	International Journal on Information Technologies and Security	2026	WOS, ESCI, Q4 Journal	1.00	Cyber Space Research Network, Bulgaria
2	Unveiling Sustainable Agriculture: An Ensemble Approach for Precision Crop and Fertilizer Recommendation with Local Interpretable Model-Agnostic Explanations	Chetan R, D V Ashoka, Ajay Prakash BV & Basamma Umesh Patil	Journal of Intelligent Information Systems	2025	Springer, SCIE, Q2 Journal	3.4	Springer (Springer Netherlands)
3	Optimized Multi-Layer Self-Attention Network for Feature-Level Data Fusion in Emotion Recognition.	Basamma Umesh Patil, Ashoka D V, and Ajay Prakash BV	IAES International Journal of Artificial Intelligence (IJ-AI)	Vol. 13, No. 4, December 2024	Scopus, Q2	2.68	Institute of Advanced Engineering and Science (IAES)

4	Data Integration-Based Human Activity Recognition using Deep Learning Models.	Patil, Basamma Umesh; Ashoka, D V; and V, Ajay Prakash B.	Karbala International Journal of Modern Science	Vol.9, Iss.1, 2023	Scopus, Q1	2.43	University of Kerbala
5	Succeeding Progress and the Artificial Cyberspace's Future in Blockchain pp. 5192-5205, September 2022.	Basamma Umesh Patil, D V Ashoka,	Neuro Quantology	Vol. 20, Issue 9, 2022	Scopus, Q3	1.00	AnKa Publisher
6	Optimization of Hyperparameters in Machine Learning Techniques for Air Quality Predictive Analysis.	Patil, Basamma Umesh, D. V. Ashoka, B V, A.P.,	International Journal on Information Technologies and Security	Vol. 13, no. 3, 2021.	WOS, ESCI, Q4 Journal	1.00	Cyber Space Research Network, Bulgaria
7	Detection of COVID-19 Infection from Chest X-Ray Images using CNN	Dhruv Rao, G. Bindu Priya, D. Harshini, B. C. Varshini, Basamma Umesh Patil	Digital Image Processing	Vol. 13, no. 3, 2021	Others	-	-
8	Automated Headlight System Using Embedded Computing System	Dr. Ashok Sutagundar, Basamma Patil, Srinidhi K S,, Yashonidhi	Indian Journal of Scientific Research (IJSR)	17(2), 2017	Others	0.91	IJSR
9	Privacy Protection for Personalized Web Search	Basamma Patil, Srinidhi K S, Pooja B	International Journal of Engineering Innovation & Research	Volume 5, Issue 3, 2016	Others	0.41	IJEIR
10	Intelligence Billing System Using Radio Frequency Identification (RFID) and ZIGBEE	Lokesh A, Basamma Patil, Divya P	IOSR Journal of Computer Engineering (IOSR-JCE)	Volume 17, Issue 3, 2015	Others	0.093	IOSR
11	Cryptographic Techniques for Avoiding Discriminating Congestion Attacks in Wireless Networks	Basamma Patil, Aruna M G	International Journal of Engineering Innovation & Research	Volume 3, Issue 3, 2014	Others	0.41	IJEIR

ii. Conferences

Sl. No	Title of the Paper	Names(s) of Author(s)	Name of the Conference	Volume No. Issue No. Year	WOS/ Scopus/ Others	Publisher
1	Deep Learning with Multimodal Fusion for Enhanced Human Activity Recognition	Basamma Umesh Patil, Chetan R, Ashoka D V	International Conference on SWSIOT 2025	2026	Springer	Springer
2	Radiation Metrix-a portable IOT enabled Ionizing Radiation Detector" at the International Conference IC-AISMART 2025	Basamma Umesh Patil, Bhuvan Gowda, Gowtham Kumar, Aditya, Jhenkar	International Conference IC-AISMART 2025	2026	Scopus	Hinweis Research

3	A Hybrid ML–CNN Heart Disease Prediction System Using Clinical Features and ECG Images with User-Friendly Risk Assessment	Basamma Umesh Patil, Shruti Sanadi, Shraddha S H, Sushma K	International Conference IC-AISMART 2025	2026	Scopus	Hinweis Research
4	Resource Allocation for Fog Enhanced Vehicular Services (FEVS)	A. Sutagundar, A. H. Attar and B. Patil	International Conference on Inventive Research in Computing Applications (ICIRCA)	2018	Scopus, IEEE Explore	IEEE Explore
5	Prevention of Discriminating Jamming attacks by Combining Cryptographic Primitives	Basamma Patil	4th National Conference on Information Processing-2014	2014	Others	
6	Automatic Reconfiguration in Wireless Mesh Networks	Basamma Patil, Aruna M G	Wireless Communication and Sensor Networks (WCSN-2013)	2013	Others	
7	Survey of Storage File Formats for Scientific Data Sets	Basamma Patil	2nd National Conference on Current Trends in Computer Science and Engineering (CSECONF 2013)	2013	Others	
8	Analysis of Intrusion Detection System & Emergence of Online Alert Aggregation	Basamma Patil	3rd National Level Conference on Information Processing 2013	2013	Others	
9	Intellectual Data Manipulation Engine-Ensuring Data Integrity and Data Consistency for Extracting the Data of the Users	Basamma Patil, Lokesh A, Aruna M G, Ashwini Patil	3rd National Level Conference on Recent Trends in Computers, Communications and Information Technology-2013 (RCCIT 13)	2013	Others	

iii. Workshops /Conferences/FDP Attended

Sl. No.	Workshop / Conference/FDP	Name of the workshop / Conference/FDP	Organizer	Date	No. of Days
1	Training Session	The POSH ACT 2013, UGC Regulations 2015.	Tech Trainers and Testers, Pune	14-02-2026	1
2	Workshop	Nurturing Minds: Fostering Student Wellbeing	JSSATE, Bengaluru	29/01/2026	1
3	FDP	Emerging Research Trends in Supercomputing, AI, and Data Science	ATAL FDP	24-12-2025 to 30-12-2025	7
4	FDP	Advancements in Semiconductors, System Software, and AI for Digital Agriculture	ATAL FDP	08-09-2025 to 20-09-2025	12
5	FDP	Recent Advances, Emerging Trends, and Applications in Robotics and Automation	ATAL FDP	01-09-2025 to 06-09-2025	7
6	FDP	AI and Data Analytics for Sustainable Development Goals	ATAL FDP	18-08-2025 to 23-08-2025	6
7	BootCamp	AI Agents BootCamp	With AI Education	03-08-2025 to 07-08-2025	5

8	FDP	A Hands-on Approach in Deep Learning, LLMs, and Prompt Engineering AI	IIIT, Nagpur.	14-07-2025 to 25-07-2025	12
9	FDP	Artificial Intelligence and Emerging Technologies	JSSSTU, Mysuru	18-03-2025 to 22-03-2025	5
10	FDP	Emerging Trends in Image Processing using Artificial Intelligence	SJMIT, Chitradurga	17-02-2025 to 21-02-2025	5
11	FDP	DevOps and Generative AI	JSSATE, Bengaluru	03-02-2025 to 07-02-2025	5
12	FDP	Large Language Model Horizons: Navigating the Future of Generative AI	Dr. AIT, Bengaluru.	21-10-2024 to 25-10-2024	5
13	FDP	Sustainable Development Goals	JSSATE, Bengaluru	28-06-2024 to 29-06-2024	2
14	Conclave	MedTech Conclave 2024	East Point Medical Sciences and Research Centre, Bengaluru.	29-02-2024	1
15	FDP	Machine Learning	VVCE, Mysuru.	10-08-2020 to 14-08-2020	5
16	FDP	Trends in IoT, Medical Image and Speech Processing	SIT, Tumakuru.	04-08-2020 to 09-08-2020	6
17	FDP	Contemporary tools and techniques for teachers and researchers in higher education: Experience of using virtual classrooms	Cambridge Institute of Technology, Bengaluru	09-05-2020	1
18	FDP	Big Data and Machine learning	BMSCE, Bengaluru	11-06-2018 to 15-06-2018	6
19	Workshop	Intellectual Property Rights Significance for Academia	SJBIT, Bengaluru	10-05-2016 to 11-05-2016	2
20	FDP	Machine Intelligence and Image Processing	SJBIT, Bengaluru	20-07-2015 to 27-07-2015	7
21	FDP	Medical Data Mining and Analysis using Open Source Tools	SJBIT, Bengaluru	03-07-2014 to 05-07-2014	3

iv. Workshops /Conferences/FDP Organized

Sl. No.	Name of the workshop / Conference / FDP	Organizer	Date	No. of Days	Role
1	Organized an awareness program on "Creating Safe Campuses: Understanding the POSH Act, 2013"	CICC, JSSATE, Bengaluru	22-12-2025	1	Coordinator, Convener, CICC
2	Organized the "Best Thesis Award 2025" at the Ph.D. Forum of the International Conference on Intelligent Computing and Communication Systems (CICCS-2025).	JSSATE, Bengaluru	18-09-2025 to 20-09-2025	2	Coordinator
3	Organized a Student Development Program on "Advancements in Machine Learning and Deep Learning: from Concepts to Applications".	JSSATE, Bengaluru	12-09-2025	1	Coordinator
4	Organized a five-day Faculty Development Program on "DevOps and Generative AI"	JSSATE, Bengaluru	03-02-2025 to 07-02-2025	5	Coordinator
5	Organized a two-day Student Development Program for PG students on "Advanced Data Structures: Concepts, Transformations and Optimizations".	JSSATE, Bengaluru	17-01-2025 to 18-01-205	2	Coordinator

6	Organized a hands-on Workshop on "Sarvam AI API's".	JSSATE, Bengaluru	15-03-2025	1	Coordinator
7	Organized a hands-on Workshop on "Machine Learning with Python"	SJBIT, Bengaluru	11.07.2019 to 13.07.2019	3	Coordinator
8	Organized 14th National Conference on "Integrated Intelligent Computing, Communication and Security", NCIIC-2019	SJBIT, Bengaluru	04.05.2019	1	Coordinator
9	Organized a TEQUIP 1.3 sponsored workshop on outcome based AICTE model curriculum for UG CSE/ISE 2018-19 Syllabi	SJBIT, Bengaluru	29.04.2019 to 30.04.2019	4	Coordinator
10	Organized a National level "Research Workshop"	SJBIT, Bengaluru	23.01.2019 to 25.01.2019	3	Coordinator
11	Organized an International Conference on "Integrated Intelligent Computing, Communication and Computing"	SJBIT, Bengaluru	24.01.2018 to 25.01.2018	2	Coordinator
12	Organized a Workshop on "Ruby on Rails"	SJBIT, Bengaluru	10.05.2016 to 11.05.2016	2	Coordinator
13	Organized a six-day Faculty Development Program on "Knowledge Discovery and Applications"	SJBIT, Bengaluru	18.01.2016 to 23.01.2016	6	Coordinator
14	Organized a Workshop on "Machine Intelligence and Image Processing"	SJBIT, Bengaluru	20.07.2015 to 24.07.2015	5	Coordinator
15	Organized a three-day Faculty Development Program on "Medical Data Mining and Analysis using Open Source Tools"	SJBIT, Bengaluru	05.09.2014 to 07.09.2014	3	Coordinator

9. Details of NPTEL/COURSERA courses completed

Sl. No.	Name of the subject	Organized by	Date of completion / Award	Grade
1	Introduction to Transformer-Based Natural Language Processing Applications.	NVIDIA	23-Nov-2025	Certified
2	Efficient Large Language Model (LLM) Customization	NVIDIA	23-July-2025	Certified
3	Building LLM Applications with Prompt Engineering	NVIDIA	22-July-2025	Certified
4	Building Transformer-Based Natural Language Processing Applications	NVIDIA	18-July-2025	Certified
5	Fundamentals of Deep Learning	NVIDIA	17-April-2025	Certified
6	Big Data Computing	NPTEL	Feb-Apr-2019	Elite

10. Membership of Professional Bodies:

Sl. No.	Name of the professional body	Membership type	Membership Number
1	International Association of Engineers (IEANG)	Life Time	146012
2	The Institution of Engineers (India)	Life Time	AM-158382-7
3	AI-ML Innovative Entrepreneurs and Engineers Association (AMIEE)	Life Time	AMI/25/01325

Irins Link : https://vidwan.inflibnet.ac.in/profile/204182

Scopus Link : https://www.scopus.com/authid/detail.uri?authorId=57205768746

Google Scholar Link : Basamma Umesh Patil - Google Scholar

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