



DR. AMBIKA P R

ASSOCIATE PROFESSOR

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PROFESSIONAL MEMBERSHIPS

- IEEE Senior membership
- MISTE -LM 96942
- IAENG-362344

RESEARCH ID'S

- Google Scholar ID- eewIFz4AAAAJ
- Orcid ID - 0000-0002-0084-8808
- Scopus ID - 57210403381

PATENTS

1. "Solar based irrigation system" September 2023. UK patent
2. "Image Processing Based Vegetable Snatching Robot"- Indian Patent Filed on August, 2025

BOOKS

1. "Internet of Things" January-2024, ISBN No: 978-93-5577-913-7, Charulatha Publications.
2. "Python for Artificial Intelligence and Data Science ISBN:978-93-6492-932-5.
3. "Mastering Power BI Applied Data Analytics and Visualization", Clever Fox Publishing (08 September 2025).ISBN No: 9789367073469.

RESEARCH PUBLICATIONS

1. One manuscript Accepted for publication in the Open Veterinary Journal (Q2 Journal).
2. Book chapter accepted for Scrivener Publishing in association with Wiley.
3. Scopus Indexed Journals: 05
4. UGC CARE/Peer Reviewed Journals: 12
5. Conference Publications:
 - International -13
 - National - 03

- Computer Science & Engineering academic professional with 15+ years of teaching experience and 1 year of industry experience, demonstrating consistent excellence in higher education, research, academic leadership, and institutional development.
- Demonstrated academic and research expertise in Artificial Intelligence, Machine Learning, Data Science, IoT, Cloud Computing, Parallel Computing, and emerging technologies through teaching, curriculum development, research publications, and innovative project guidance.
- Academic and research experience demonstrated through significant contributions in scholarly publications, funded projects, patents, book authorship, and innovation, including 21 journal publications, 15+ conference papers, 3 published books, and multiple sponsored projects.
- Established leadership in managing departmental and institutional responsibilities including NAAC accreditation, VTU research centre coordination, IEEE student branch counselor and Initiated and Established IIT Bombay Virtual Lab.
- Committed to academic excellence, research advancement, institutional reputation building, and shaping future-ready engineering graduates through innovation-driven education.

EXPERIENCE: 15+ Year (Teaching) & 01 Year (Industry)

1. B.M.S College of Engineering, Bengaluru

- Associate Professor (13th July 2026 to till date)

2. City Engineering College, Bengaluru

- Associate Professor (November 2025 to till date)
- Professor (March 2024 to November 2025)
- Assistant Professor (July 2012 to Feb 2024)

3. T John Institute of Technology, Bengaluru

- Designation: Lecturer (July 2010 to June 2012)

4. SAP Labs India Pvt. Ltd, Bangalore

- Technical Associate (October 2005 to June 2007)

EDUCATION

1. Ph.D. from Visveswaraya Technological University (VTU)

Research Centre: BMSIT, Bangalore. Awarded on 7th March 2024.

2. M Tech in Computer science and Engineering

Dayananda Sagar College of Engineering, Bangalore. 2008-2010 (Affiliated to VTU)

3. B E in Computer science and Engineering

Yellamma Dasappa Institute of Technology, Bangalore. 2001-2005(Affiliated to VTU).

AICTE/KSCST FUNDED PROJECT

1. **AICTE Training and Learning (ATAL)- ATAL Basic FDP** on “basic mathematical and statistical foundation for cybernetics criminal laws and cybersecurity” held during 4th Dec to 9th Dec 2023(Rs. 3.5 Lakhs). Role: Co-Coordinator.
2. **KSCST Projects:**
 - **“DIGITAL ASSISTANT FOR LEGAL AWARENESS”2023-2024.**
(Reference No.: 47S_BE_2592)
 - **“User Friendly Devices for Aged or Physically Challenged People” 2022-2023**
(Reference no:46S_BE_4458)
 - **“SMART AGRONOMIC SYSTEM WITH GLOBAL STORAGE ACCESS USING IoT”, 2021**
(Reference no: 44S_BE_4354,2021)
 - **“DETECTION AND CLASSIFICATION OF BREAST CANCER”, 2018**
(Reference no:41S_BE_1695,2018)

PUBLICATIONS IN JOURNALS:

1. **“Mobile-Based Deep Learning Approach for the Early Diagnosis of Canine Skin and Eye Diseases Using MobileNetV2”** (Manuscript Number: OVJ-2025-11-1084 ,**Open Veterinary Journal (Q2 Journal)**.
2. **“Blockchain-Anchored Model Lifecycle Governance for Privacy-Preserving Biomedical AI Systems” with Chapter ID: [AIGov_016]** book chapter accepted for Scrivener Publishing in association with Wiley.
3. **“Joint Angle Prediction and Joint-Type Classification in Human Gait Analysis Using Explainable Deep Reinforcement Learning”** Indonesian Journal of Electrical Engineering and Computer Science Vol. 99, No. 1, ISSN: 2502-4752 (**Scopus Indexed**) DOI: <http://doi.org/10.11591/ijeecs.v41.i2.pp564-578>
4. **“EMERGENCY VEHICLE DETECTION AND SMART TRAFFIC SIGNAL CONTROL USING AI-ML”** Published in International Journal of Innovative Research in Technology-IJIRT (www.ijirt.org) ISSN 2349-6002 in Volume 12 Issue 4, September 2025.
5. **“Balancing environmental sustainability and technology innovation in 6G wireless technology”-** DOI:10.1109/CE2CT64011.2025.10939424-IEEE Explore.
6. **“Exploring Innovations in Amphibious Drones: Advancing Dual-Environment Capabilities for Enhanced Surveillance - A Comprehensive Study”,** Journal of Xidian University, ISSN NO: 1001-2400, VOLUME 18, ISSUE 6, 2024, DOI- <https://doi.org/10.5281/Zenodo.12168903>.
7. **“Deep Learning-Based Framework For Wildfire Detection”,** Journal of Emerging Technologies and Innovative Research (JETIR), ISSN-2349-5162, May 2024, Volume 11, Issue 5 2024. DOI : <http://doi.org/10.1729/Journal.39875>.
8. **“A Chatbot as A Digital Assistant For Legal Awareness”,** Journal of Emerging Technologies and Innovative Research (JETIR), ISSN-2349-5162, May 2024, Volume 11, Issue 5 2024. DOI: <http://doi.org/10.1729/Journal.39876>.
9. **“Efficient network management and security in 5G enabled internet of things using deep learning algorithms”,** International Journal of Electrical and Computer Engineering (IJECE), ISSN 2088-8708. February 2024. DOI: <http://doi.org/10.11591/ijece.v14i1.pp1058-1070>
10. **“An Efficient and Robust Machine Learning Framework for High-Dimensional Data Exploration and Analysis”** Tuijin Jishu/Journal of Propulsion Technology, Vol. 44 No. 6 (2023), January 2024.

11. **"Optimization of sub-space clustering in a high dimension data using Laplacian graph and machine learning"** published in Inderscience Publishers - International Journal of Bioinformatics Research and Applications (IJBRA). DOI: [10.1504/IJBRA.2022.121763](https://doi.org/10.1504/IJBRA.2022.121763) Published Online: March 21, 2022 pp 68-83. <https://www.inderscience.com/info/ingeneral/forthcoming.php?jcode=ijbra>
12. **"Laplacian Matrix Based Spectral Graph Clustering"** published in International Journal of Innovative Technology and Exploring Engineering (IJITEE), ISSN: 2278-3075, Volume-9 Issue-2S, Page No:666-670, December 2019.
13. **"Review of Existing Research Contribution towards Dimensional Reduction Methods in High Dimensional Data"** Published in Springer Lecture Notes on Data Engineering and Communications Technologies Volume 15 (Page No-409-421). **Scopus Indexed** (<https://doi.org/10.1007/978-981-10-8681-6>).
14. **"Container based processing of large-scale Geospatial data"** published in International Journal of Creative Research Thoughts (IJCRT) Volume 6, Issue 2 April 2018 | ISSN: 2320-2882.
15. **"A Review On Sparse Subspace Clustering For High Dimensional Data (HDD)"**, IJCEA Vol., issue IX, Sep 2017 ISSN 2321-3469.
16. **"IoT integrated Big data analytics framework for smart building systems"** IJCEA Vol. XI, issue IX, Sep 2017 ISSN 2321-3469.
17. **"ICT Integration in Higher Education: Challenges and Benefits"**, presented in the 19th ISTE Karnataka State Faculty Convention held at Sri SaiRam College of Engg, held on 3rd NOV 2016.
18. **"Big Data: Towards next generation Analytics"**, Published in IJIRCCE, Vol.3, Special Issue 5, May 2015. ISSN(Online): 2320-9801 ISSN (Print): 2320-9798.
19. **"C-RAN supporting multi-RATs for 5G mobile networks"** published in IJIRSET titled Vol.5, special issue 10, May 2016.

Publications in Conferences:

International Conferences:

1. **"Blockchain based Green Energy Tokenization and Trading Platform"** presented in the International Conference for Women in Innovation, Technology & Entrepreneurship (ICWITE 2026) 978-8-3195-1097-8/26©2026 IEEE held at BMS College of Engineering (BMSCE) on 24–25 July 2026.
2. **"Time Series Analysis and Forecasting for Production of Finger Millet (Ragi Crop)"**, presented in 6th **INTERNATIONAL CONFERENCE ON RECENT TRENDS IN ENGINEERING, TECHNOLOGY AND MANAGEMENT 2026**, SUGUNA COLLEGE OF ENGINEERING Nehru Nagar (W), Kallapatti Road, Coimbatore On 10th & 11th April 2026.
3. **"Implementation of Smart Traffic and Urban Resilience system using IoT-Based Real-Time Monitoring"** presented in 11th **International Conference** on Information and Communication Technology for Intelligent Systems, held on APRIL 9 - 11, 2026 in Bangkok, Thailand.
4. **"Deep Learning Based Framework for the Automatic Detection of Cyberbullying On Social Networks"** presented in **Springer**-International Conference on Smart Wireless Systems and IOT(SWSIoT-2025) on 19th to 20th Sept 2025.
5. **"Safe Note Encryption Utilizing Fernet Algorithm"** presented in **Springer**-International Conference on Smart Wireless Systems and IOT(SWSIoT-2025) on 19th to 20th Sept 2025.

6. **"Balancing Environmental Sustainability and Technological Innovation in 6G Wireless Technology"**, 2025 First International Conference on Advances in Computer Science, Electrical, Electronics, and Communication Technologies (CE2CT), IEEE Conference held on 21-22 Feb. 2025.
7. **"Deep Learning Frameworks for Detecting Cyberbullying: A Review of Techniques and Applications"** International Conference on Digital Intelligence and Engineered Systems, on 9th and 10th May 2025 at RRIT Bangalore, ISBN: 978-93-5842-978-7.
8. **"Secured Fundraiser Using Blockchain and Artificial Intelligence"**, the International Conference On "Computer Science & Technology Allies in Research" (ICCSTAR)-2023 Organised by Department of CSE, held during 26th & 27th May 2023 at RRIT, Bengaluru.
9. **"Laplacian Matrix Based Spectral Graph Clustering"** has been presented in International Conference on Data Engineering and communication Systems (ICDECS-2019) RNSIT, Bangalore. December 2019.
10. **"Review of Existing Research Contribution towards Dimensional Reduction Methods in High Dimensional Data"** has been presented in Springer International conference on Computer Networks and Inventive Communication Technologies (ICCNCT - 2018) on 26-27 April 2018.
11. **"A Multi-keyword Ranked Search Scheme that is Dynamic and Secure over Cloud Data"**, International Journal of Innovative Research in Science, Engineering and Technology, Vol. 5, Special Issue 10, May 2016, ISSN(Online) : 2319-8753.
12. **"Big Data: Towards next generation Analytics"**, presented in the International Conference on Advances in Computer and Communication Engineering (ACCE2015), held on 5th&6th May 2015, at Vemana Institute of Technology, Bengaluru.
13. **"A Journey on an energy optimization technique using "FEMTOCELLS"**, presented in the International Conference on Advances in Computer and Communication Engineering (ACCE2014), titled held on 21st&22nd April 2014, at Vemana Institute of Technology, Bengaluru.
14. **"A Study on On-Demand Multipath Routing Protocols AODV and DSR in MANET"**, presented in the International Conference on Multimedia Processing, Communication and Information Technology (MPCIT 2013), held on 19 to 21st December 2013, at JNNCE, Shimoga.

National Conferences:

1. **"A comprehensive review of scalable digital platforms for alumni community building and professional growth"**, NATIONAL CONFERENCE ON EMERGING TRENDS IN SCIENCE, ENGINEERING AND TECHNOLOGY [NCETSET-2024], ISBN: 978-93-6348-937-0, Leilani Katie Publication and PRESS. December 27th 2024.
2. **"Fake face detection using convolution neural networks: Deep learning approach"**, International Journal of Combined Research and Development(IJCRD), National conference on India's Journey towards the Trillion Economy - Opportunities and Challenges held on September 2023 at AMCEC, Bangalore.
3. **"Covid-19 Face mask detection and alert system using Machine learning Techniques"** presented in National E-Conference on "Computer Science and Technology Allies in Research" (NCCSTAR-2021) at RRIT, Bangalore.

WORKSHOPS/FDP/SEMINARS ATTENDED

- Faculty Development Programs (FDPs): 20
- Workshops/Training Programs: 8
- Seminars/Conclaves: 8

CONFERENCES/WORKSHOPS/FDP/SEMINARS ORGANISED

- Faculty Development Programs (FDPs): 03, ATAL-FDP-01
- Conferences: 04
- Ideathon /Workshops/Skill Development Programs: 20+
- IEEE Student Branch Activities: 04
- Extension/Outreach Activities: 15+

MOOC/NPTEL CERTIFICATION COURSES

- Winter Course on Skill Development Program on “Research and Publications”- Indian Institute of Technology(IIT), Dharwad, Karnataka, 16th to 20th December 2024.
- NPTEL Course -“Outcome Based Education” on Aug-Oct 2025.
- NPTEL Course and FDP- “Research Methodology” during April 2025.
- NPTEL Course and FDP- “Operating System Fundamentals” during December 2023.
- NPTEL Course and FDP- “Introduction to Machine learning” during June-Sep 2022.
- “Introduction to Artificial Intelligence” from Infosys Springboard, on November 14th 2023.
- “Introduction to Data Science” from Infosys Springboard, on November 14th 2023.

RESOURCE PERSON/ SESSION CHAIR

- Guest lecture on “Agentic AI” on 6th Jan 2026 at RRIT Bangalore.
- Technical seminar on “Agentic AI: The New Frontier of Artificial Intelligence” on August 29th 2025 at Presidency University.
- Faculty Development Program on “Issues, Opportunities and Challenges in IOT” organized by Dept. of CSE, City Engineering College (21/03/2022 to 25/03/2022).
- Workshop on “ADD on Course - “ML Conf EDU” organized by Dept. of ISE at Don Bosco Institute of Technology on 15/12/2021.
- Session chair for the International Conferences.

DEPARTMENT LEVEL RESPONSIBILITIES

- Established C-Hive, the CSE technical club fostering innovation, coding, and technology awareness.
- Co-Convenor, Full Stack Fundamental BOOTCAMP (2022)
- Guided numerous UG and PG projects
- Managed departmental roles including project coordination, timetable, E-Vidya, industrial visits, technical events and seminars.
- Editorial leadership for Department Magazine Tech Samachar and project exhibition proceedings.

INSTITUTION LEVEL RESPONSIBILITIES:

- NAAC Criteria 3 Head (2024 till June 2026), NAAC Criteria 7 Coordinator (2023–2024)
- VTU Research Centre Coordinator
- IEEE Student Branch Counselor
- Initiated and Established IIT Bombay Virtual Lab at City Engineering College
- Co-Coordinator for AICTE ATAL FDP (2023-2024)
- Editorial member for college magazines and conference proceedings.