

DR. VINUTHA H

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Location: Bengaluru, Karnataka, India

PROFESSIONAL SUMMARY

A dedicated Doctorate in Computer Science with over 17 years of blended experience across Academia (10+ years), Research (8 years), and Industry (2 years). Recognized for academic leadership, student mentorship, curriculum development, and industry-academia collaborations. Specializing in Computer Vision, Pattern Recognition, Soft Computing, and AI/ML applications, with a strong record of international publications, funded research projects, and patents.

CORE COMPETENCIES

- **Technical Domains:** Computer Vision, Machine Learning, Deep Learning, Pattern Recognition, Soft Computing, Data Mining, Cloud Computing, Cyber Forensics
- **Programming & Tools:** Python, C, C++, Java, JSP, MATLAB, Big Data Analytics, HTML/CSS
- **Academic Leadership:** Outcome-Based Education (OBE), Curriculum Framing, NBA Accreditation, Student Mentorship & Project Guidance (Mini, Capstone, KSCST)
- **Industry Relations:** Internship Coordination, MoU Facilitation, CSR Academic Program Integration

EDUCATION & FELLOWSHIP

- **Post-doctoral Fellowship** | Casimir Pulaski University of Radom, Poland (2026)
- **Ph.D. in Computer Science & Engineering** | BMSIT & Management, VTU (2023)
 - *Thesis:* Efficient Algorithmic Models for Anti-spoofing in Facial Biometric System
- **M.Tech. in Computer Science & Engineering** | Dr. Ambedkar Institute of Technology, VTU (2011)
 - *Aggregate:* 76.08% (First Class with Distinction)
- **B.E. in Computer Science & Engineering** | Bangalore Institute of Technology, VTU (2007)
 - *Aggregate:* 72.25% (First Class with Distinction)

WORK EXPERIENCE

Assistant Professor | B.M.S. College of Engineering, Bangalore

Oct 2024 – Present

- Instruct courses in Operating Systems, Big Data Analytics, C, Python Programming, and Indian Knowledge Systems for undergraduate students.
- Guide Capstone and mini-project teams; mentor PG/UG research initiatives including HPE Career Preview Program projects.
- Act as Faculty Coordinator for Internship Programs, establishing in-house AI evaluation internships in partnership with TestAIng Solutions Pvt. Ltd.
- Organize industrial visits and workshops on OS Virtualization and Spark Application Development.

Assistant Professor | Ramaiah University of Applied Sciences, Bangalore

Feb 2024 – Oct 2024

- Delivered undergraduate courses in Computer Science and Engineering, contributing to departmental academic activities and mentoring.

Assistant Professor | Dr. Ambedkar Institute of Technology, Bangalore

Dec 2018 – Dec 2023

- Handled subjects including Data Science, Java Programming, Cloud Computing, Cyber Forensics, and Computer Organization.
- Served as Departmental Coordinator for Internships, Capgemini C2TC, Timetable, and Student Activity Points.
- Facilitated 2-party and 3-party MoUs with Technoserve India Foundation and Capgemini to establish a Nodal Digital Academy Lab equipped with 50 systems.
- Contributed as Course Coordinator in syllabus framing for Big Data, Cyber Forensics, Java Full Stack, and Cloud Infrastructure.

Assistant Professor | Sapthagiri College of Engineering, Bangalore

Aug 2018 – Dec 2018

- Handled core undergraduate computer science courses and student mentoring.

Full-Time Research Scholar | BNM Institute of Technology, Bangalore

Mar 2015 – Aug 2017

- Conducted doctoral research focused on handcrafted feature extraction, deep learning frameworks, and anti-spoofing in face biometrics.

Assistant Professor | Acharya Institute of Technology, Bangalore

Jul 2011 – Apr 2012

- Taught core CSE courses and delivered expert technical talks.

Software Engineer | CGI, Bangalore

Sep 2007 – Sep 2009

- **Client - Insurance Domain (UIC, Echelon, Magnolia):** Analyzed Java/XML-based architectures, coded change requests, authored unit test cases, and maintained artifacts for CMMI auditing.
- **Client - Telecom Domain (Bell Canada):** Developed modules for migrating Struts-based applications to WebLogic Portal environments.

PATENTS & CONSULTANCY

Patents

1. **International Patent (Published):** *IoT Connected Smart Surveillance Drone with AI Powered Threat Detection* (App No: 202441103988, Pub Date: Jan 2025)
2. **Indian Patent (Published):** *Trespassers Detection System For Agriculture Fields Using Artificial Intelligence & Methods Thereof* (App No: 202041047576 A, Pub Date: Nov 2020)

Consultancy Projects

- **Digital Dispatch Management System** | *BRIOT Technologies Pvt. Ltd., Pune* (Rs. 45,000 | Apr 2022 – Oct 2022)

GRANTS & RESEARCH PROJECTS

- **KSCST Student Project (44th Series, 2020–2021):** *Automated contactless COVID-19 detection with the aid of X-ray images using deep neural network* (Rs. 6,000)
- **KSCST Student Project (43rd Series, 2019–2020):** *Towards many to many communications among Deaf, Dumb and Blind users* (Rs. 5,500)

SELECTED PUBLICATIONS

1. **Vinutha H.** (2025). *EconCausalAI: An Integrated Framework for AI Powered Economic Policy Analysis and Simulation*. IEEE Explore (Scopus Indexed) – **Best Paper Award**.
2. **Vinutha H., Yogananda B. V.** (2024). *Advanced Meta-Learning Techniques for Inference of Neural States Under Anesthetic Conditions*. ICRASET, IEEE Xplore.
3. **Vinutha H., Thippeswamy G.** (2023). *TLA Framework: A Transfer Learning Based Approach for Face Anti Spoofing*. International Journal of Computer Theory and Engineering, 15, 143 (Scopus Q3 / SCI).
4. **Vinutha H., Thippeswamy G.** (2022). *Spoof Detection using Elegant Pairing Method on Stockwell Transform in Face Biometric System*. NeuroQuantology, 20(10), 8888–8896 (Scopus Q4).
5. **Vinutha H., Thippeswamy G., Dhanapal R.** (2020). *A New Ensemble of Texture Descriptors Based on Local Appearance-Based Methods for Face Anti-Spoofing*. Journal of Critical Reviews, 7, 644 (Scopus Q1).

6. **Vinutha H.**, Nagashree N. *An Ensemble of Geometric Stemming and Feed Forward RNN to Translate Brahmi Script into Indian Region*. International Journal of Artificial Intelligence (Accepted).

AWARDS & HONORS

- **Best Paper Award:** *EconCausalAI Framework* at the International Conference on Artificial Intelligence in Engineering Systems (2025).
- **Best Poster Award (1st Prize):** *Efficient Anti-spoofing Models for Face Biometric System* at IEEE-CAS Research Conclave, Malnad College of Engineering (2022).

PROFESSIONAL DEVELOPMENT & FDPs

- **Deep Learning & Agentic AI:** 1-Week FDP by E&ICT Academy, IIT Guwahati & RV University (Jan 2026).
- **Quantum Computing & AI:** FDP on *Next-Generation Computing: Convergence of Quantum Technologies, AI, and Quantum ML*, BMSCE (Feb 2026).
- **Autonomous Systems:** AICTE ATAL FDP on *Artificial Intelligence For Self Driving Cars*, BOSCH & BNMIT (Jul 2025).
- **Industry AI Deployment:** *Industry-Driven AI: From Foundations to Real-World Deployment*, Infosys-IGNITE Academy (Feb 2026)