SMRITHI SURENDRAN

Ph.D. Research Scholar – Computer Science & Engineering

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PROFILE SUMMARY

Ph.D. Scholar in Computer Science and Engineering at PES University with 3.5 years of teaching experience in core Computer Science subjects and one year of industry experience as a Software Engineer. Passionate about delivering high-quality engineering education by combining strong academic foundations, practical industry exposure, and research-driven learning. Experienced in mentoring undergraduate students, designing engaging classroom experiences, and bridging the gap between theoretical concepts and real-world applications. Seeking a full-time Assistant Professor position where I can contribute to academic excellence, student development, curriculum enhancement, and collaborative research initiatives.

EDUCATIONAL QUALIFICATIONS

Ph.D., Computer Science and Engineering (Ongoing)
PES University, Bengaluru | 2021 – Ongoing | Supervisor: Dr. Vinodha V

- Research Title: Multimodal Deepfake Detection using Deep Learning-based Audio-Visual Analysis
- Status: Coursework, Comprehensive Viva & Proposal Defence completed

MTech, Computer Science and Engineering
PES University, Bengaluru | 2019 | CGPA: 8.2

BTech, Information Science and Engineering
Vemana Institute of Technology, Bengaluru | 2016 | CGPA: 6.42

PROFESSIONAL EXPERIENCE

Teaching Assistant, Dept. of CSE | PES University, Bengaluru
January 2021 – June 2024 | 3.5 Years, concurrent with Ph.D.

- **Subjects Handled:** Database Management Systems, Design and Analysis of Algorithms, Operating Systems
- **Labs Conducted:** Python, DBMS, DAA
- Assisted in syllabus finalization and revision for existing courses; assisted in preparation of lecture materials.
- Co-mentored capstone projects and evaluated course-related mini-projects.

Software Engineer | Accord Software and Systems Private Limited
July 2016 – June 2017 | 1 year

- Contributed to designing the Data Extraction Tool (DET), a user interface used to generate reports of bags scanned at the airport.
- Prepared SRS & SDD documentation
- Designed test scenarios/cases for functional testing.

RESEARCH & PUBLICATIONS

Doctoral Research Focus: *Research focuses on detecting deepfakes by jointly analysing audio and visual cues in videos, using a cross-attention-based deep learning architecture to model inconsistencies between the two modalities, with evaluation across multiple benchmark datasets.*

Publications:

- Air Quality Monitoring and Predicting System for Sustainable Health Management using Multi-Linear Regression in IoT - ***Intl. Journal of Computing and Digital Systems***, 2020.
- A Study on IoT Layered Attacks and Countermeasures - ***4th ICAC3N***, 2022.

Research Interests: Machine Learning, Deep Learning, Computer Vision, Multimodal Learning, IoT, Cybersecurity

WORKSHOPS CONDUCTED

"AI in Education: Practical AI Tools for Teaching Faculty"
Hands-on Workshop for Faculty | PES Main Campus | February 2026

"AI in Education"
Session on Foundations of Modern AI and AI-assisted Research Methods | PESU Research Centre | January 2026

TECHNICAL SKILLS

Programming: Python, C, SQL
AI / Skills: Claude, Gemini, NotebookLM, Perplexity, Brisk Teaching, QuillBot, Gamma
Tools: Google Colab, PyCharm, Overleaf (LaTeX), MS Office, Linux/Ubuntu

CERTIFICATIONS & WORKSHOPS ATTENDED

- Workshop on "CyberTEA: Cybersecurity Trends and Emerging Applications" | Indian Institute of Information Technology (IIIT) Sri City, 2024.
- Certification in "Introduction to Artificial Intelligence" | Simplilearn, 2020.
- Certification in "Introduction to IoT" | Simplilearn, 2020.

ACADEMIC & ADMINISTRATIVE CONTRIBUTIONS

- Provided mentorship to students in the design and development of a dedicated research portal for PES scholars, 2024.
- Contributed to the successful organization of a two-day national symposium on "The Impact of AI in Education" as part of the organizing committee, 2023.

DECLARATION

I hereby declare that the information provided above is true and accurate to the best of my knowledge.