### Education

**PES** University

September 2022 - Present

Bachelor of Technology in Computer Science & Engineering - CGPA: 8.06

Bengaluru, Karnataka

### Experience

### Centre of Cognitive Computing and Computational Intelligence

June 2025 - August 2025

Summer Research Intern

Bengaluru, Karnataka

- Built a career advisory platform that analyzed 30,000+ job postings & descriptions and 90,000+ courses, identifying skill gaps & recommending relevant skill-sets with a precision of almost 0.98.
- Optimized DSSM(Deep Structured Semantic Model) achieving a training loss of 0.08 & validation loss of 0.04.

# **Projects**

AI-Powered Career Skill Gap Analysis | Python, Sentence Transformers, ChromaDB, DSSM, Streamlit July 2025

- Integrated all-MiniLM-L6-v2 embeddings & DSSM to enhance semantic search & course recommendations for skill gaps.
- Recommended targeted courses to bridge skill gaps by aligning user competencies with job-specific requirements.

Blockchain Powered Healthcare Insights | Python, IPFS, Multi-Chain Blockchain, Streamlit

March 2025

- Extracted insights from IPFS-stored EHR's using unique blockchain ID's to ensuring data integrity & traceability.
- Applied OCR & Ollama to patient histories leading to faster clinical decisions, predicting adverse drug-drug reactions & recommending treatments.

Regulatory Mining Intelligence Bot | Python, Sentence Transformers, MongoDB, Streamlit

April 2025

- Developed a legal chatbot leveraging NLP to interpret mining laws, regulations, & compliance guidelines, enabling dynamic retrieval of relevant provisions in response to user queries.
- Used Sentence Transformers to detect contradictions & fetch mining law documents via semantic search.

Arduino-Based Intruder Detection and Alert System | Arduino, C++, SoftwareSerial, Ultrasonic Sensor April 2024

- Built a C++ based setup using ultrasonic sensors, triggering alerts via LED, buzzer, & GSM.
- Achieved near-instant detection < 100 ms with real-time serial communication, ensuring quick & reliable security alerts.

Cloud File Transfer System using UDP | Python, UDP, Socket Programming, SSL, File Handling

March 2024

- Built a Python-based UDP client-server system supporting upload/download/listing & remote execution, handling files up to 100MB.
- Implemented dynamic IP handling and parallel command support, enabling 5+ concurrent clients.

## Technical Skills

Languages: Python, C, C++, Java, Rust

AI/ML: TensorFlow, PyTorch, Scikit-learn, NLTK, SpaCy, LLM

Databases: SQL, MongoDB, ChromaDB

Tools / Platforms: GitHub, Docker, Kubernetes, VSCode, Jupyter, Google Colab

Operating Systems: Windows, Ubuntu, Linux

### Achievements

### **Heal-O-Code Hackathon**

Mar 2025

• Secured Top 6 out of 50+ teams by building a Blockchain & ML- based healthcare decision support tool.

### MRD Scholarship

April 2023

• Awarded the prestigious MRD Scholarship in 1st Semester, receiving a 20% tuition fee reimbursement.

## Distinction Scholarship

August 2025

• Received the **Distinction Scholarship** of Rs.2000 for achieving **SGPA** > **7.75** in Semesters 2-6.