Tejaskumar Reddy J

AI/ML | Computer Vision | Agentic Systems

Bengaluru, India

+91-7349089681

tejaskumar.jaikrishnan@gmail.com

GitHub

LinkedIn

Education

– **B.Tech, Electronics & Communication Engineering**
PES University, Bengaluru 2023 – 2027

– **Minor in Computer Science Engineering**
PES University, Bengaluru

Experience

– **Research Intern** June 2025 – July 2025
Bengaluru, India Centre for Health Care, PES University

- Developed a cancer diagnosis system using VOC (Volatile Organic Compounds) analysis.
- Identified key biomarkers and achieved **91.7%** diagnostic accuracy.
- Implemented and tested various methodologies from various research studies in the similar field.

– **App Developer Intern** Oct 2023 – Jan 2024
Remote Cisco ThingQbator, Cohort-6

- Designed and built Flutter-based mobile app for neurodivergent users.
- Implemented responsive UI with Flutter & Figma; integrated accessibility features.
- Ranked in top 10 teams nationwide among 200+ participants.

– **Freelance Contributor** Nov 2024 – Jan 2025
Remote Broadstack

- Built AI knowledge assistants using LLMs, Agentic AI, and RAG frameworks.
- Created PDF to JSON tool with VLMs and CrewAI for document processing.
- Used CrewAI, LangGraph, ChromaDB, Groq for large data pipelines.

Projects

– **SLAM-based Mapping with Drone Footage** Oct 2023 – Jan 2024
PES University

- Developed SLAM system using RGB drone footage with hyperspectral data fusion.
- Built visualization tools for enthalpy and site-specific mapping.
- Tools: Python, OpenCV, SLAM Libraries, Sensor Data Processing.

– **Space-Grown: AI Agricultural Tool** Jan 2024 – Jan 2025
PES University

- Built ML pipeline for farmers using satellite imagery & weather APIs.
- Implemented CV algorithms for soil condition and crop suitability.
- Created dashboards with actionable recommendations.

– **Comparative Leukemia Classification** Nov 2024 – Jan 2025
PES University

- Benchmarked activation functions in CNNs for Leukemia detection.
- Improved classification precision with custom neural architectures.
- Tools: Python, TensorFlow, OpenCV.

– **VOC-Based Cancer Detection** June 2025 – July 2025
PES University

- Analyzed urinary VOC concentration profiles from 305 patient samples for bladder/prostate cancer diagnosis.
- Performed data preprocessing, SMOTE-based class balancing, and feature reduction using mutual information.
- Trained multi-class models using Random Forest, LightGBM, and XGBoost with hyperparameter tuning.
- Reduced feature space from 49 to 15 key biomarkers while maintaining high accuracy.
- Evaluated models using accuracy, precision, recall, F1-score with detailed class-wise performance reports.

Technical Skills

– Languages: Python, C, SQL, Dart
– Frameworks/Tools: TensorFlow, PyTorch, OpenCV, CrewAI, LangGraph, ChromaDB, Groq
– Systems: Agentic AI, RAG, SLAM, VLMs, NLP, Computer Vision
– Dev Tools: Flutter, Figma, Git, VS Code
– Concepts: Deep Learning, Data Fusion, Data Visualization, Autonomous AI

Certifications

– Agentic Systems 101 – PESU IO (Oct 2024 – Nov 2024)
– Python for CV with OpenCV & DL – Udemy (Jul 2024)
– TensorFlow Mastery – PESU IO (Mar 2024 – Apr 2024)
– Complete SQL Bootcamp – Udemy (Jan 2024)
– Flutter Primer – PESU IO (Sep 2023 – Oct 2023)

Positions of Responsibility

– Secretary (Club Head) – IEEE CS PESU (Jan 2025 – Present)
– Treasurer (Club Head) – IEEE RAS PESU (Jan 2025 – Present)
– Events and Logistics – IEEE RAS PESU (Feb 2024 – Jan 2025)
– Sponsorship Team – IEEE CS PESU (Jan 2024 – Jan 2025)