JAGADESH CHILLA

Visakhapatnam, Andhra Pradesh | P: +91 6309476048 | chillajagadesh68@gmail.com | linkedin | github | portfolio

EDUCATION

LOVELY PROFESSIONAL UNIVERSITY Jalandhar, Punjab
Bachelor of Technology in Computer Science & Engineering 2021 - 2025
- Cumulative GPA: 7.8/10
- Relevant Coursework: Data Structures, Software Engineering, Machine Learning, Financial Analytics, Artificial Intelligence

TIRUMALA JUNIOR COLLEGE Visakhapatnam, Andhra Pradesh
Class XII – BIEAP | Percentage: 95.7% Jul 2020 - Jul 2021

THE SUN SCHOOL Visakhapatnam, Andhra Pradesh
Class X – BSEAP | CGPA: 10/10 Jul 2018 - Jul 2019

INTERNSHIPS

UPGRAD Remote
AI Intern Jan 2025 – Apr 2025
- Engineered an AI-driven image enhancement model with SRCNN and UNet, improving endoscopic visuals by 18% (PSNR) and 12% (SSIM).
- Implemented a real-time media processing platform using Flask, PyTorch, and OpenCV, **deployed** on Heroku and Render for multi-device accessibility.
- Facilitated adoption among healthcare professionals by **integrating** intuitive UI features and ensuring smooth deployment.

PROJECTS

YOUTUBE CONTENT RESEARCH AND BLOG GENERATION August 2025
- Technologies Used: Python, LangChain, Crew ai
- Orchestrated an autonomous multi-agent system that analyzed YouTube content, processed transcripts, and generated structured blog posts.
- Established specialized agent roles (Blog Researcher, Blog Writer) that collaborated via shared memory and task handoff for streamlined execution.
- Implemented modular orchestration, caching, API integrations (e.g., YouTube API), and fallback mechanisms, enhancing robustness and scalability.

PDF QUERY RAG WITH ASTRADB AND LANGCHAIN August 2025
- Technologies Used: Python, LangChain, RAG, Astra DB
- Designed a document question-answering system using Retrieval-Augmented Generation and AstraDB vector search
- Configured LangChain for retrieval orchestration, prompt assembly, and precise answer generation.

AI SMART IRRIGATION SYSTEM Feb 2023 – Mar 2023
- Technologies Used: Python, ML, YOLOv5, ReactJS
- Developed an IoT-enabled irrigation solution using ML decision logic and drone-based monitoring.
- **Built** a ReactJS dashboard for real-time reporting and control, achieving a 30% reduction in water consumption.
- Facilitated early detection of crop stress, promoting sustainable agriculture.

ACHIEVEMENTS

- Spearheaded winning solution at **TECH-IOT Hackathon (LPU, 2023)**, outperforming 100+ teams with an AI-powered analytics system.
- Secured **2nd Place at TECHKRITI 2.0 Hackathon (IIT Kanpur, 2023)** for innovation in resource-efficient agriculture using ML and IoT.
- Successfully **accomplished Oracle GenAI Professional Certification**, gaining expertise in **LLMs, RAGs, and Generative AI applications**.
- Recently **presented a research paper** titled *"Endoscopic Image Enhancement"* at a technical conference; the paper is scheduled for **publication in 8 months**.

TECHNICAL SKILLS

Programming & Databases: Python, SQL, Java
AI/ML: PyTorch, TensorFlow, Scikit-learn, Transformers, Supervised & Unsupervised Learning, Neural Networks, Regression, Clustering, NLP, Computer Vision
Generative AI & Agents: LangChain, Crew AI, RAG, LLM Fine-tuning, Agent Orchestration
Data Handling: Pandas, NumPy, Data Manipulation & Analysis, Linear Algebra, Probability, Statistics
Tools & Platforms: Jupyter, VS Code, Git, Docker, Kubernetes, MLflow, GitHub Actions
Cloud: AWS, Azure