UPENDRA PALURU

Visakhapatnam, Andhra Pradesh

☎ +91 9885554967 ✉ paluruupendra88@gmail.com in LinkedIn ⊙ GitHub Portfolio

Education

National Institute of Technology, Durgapur	November 2022 – May 2026

Bachelor of Technology

Experience

Software Engineering Intern	Jun 2025 – Jul 2025

Edunet Foundation

- Built a capstone project **Cold Email Generator** ⊙ using **LangChain, Groq LLaMA 3.1, ChromaDB, and Streamlit** that automated job scraping, skill matching, email generation with LLMs and vector search.
- Deployed an AI-powered job outreach tool with optimized retrieval pipelines using vector search for enhanced job-candidate matching efficiency.

Projects

TaxEase - AI-Driven Tax Filing | *React, Node, Python, OpenCV, EasyOCR, Langchain* **GitHub Repo Link**

- Built TaxEase.AI, an AI-powered tax solution that streamlines **PAN-based onboarding, automates filing,** and ensures error-free compliance, maximizing savings for individuals and businesses.
- Used **KD-trees** and **knapsack optimization** for efficient tax calculation, boosting deduction efficiency by 30%.
- Deployed an **LLM-backed chatbot (RAG)** with vector retrieval (**Chroma**) for personalized tax suggestions; integrated with **REST API endpoints** for scalability.

MedEase - Doctor Specialist Recommender | *Python, BeautifulSoup, Scikit-learn* **GitHub Repo Link**

- Built an **AI-powered healthcare recommender** by designing web crawlers for Practo.com and performing **data preprocessing** (cleaning, imputation, and symptom binarization) with analysis for model readiness.
- Developed predictive models using **KNN** , **Gaussian Naive Bayes** to recommend specialists from patient symptoms.

Whole-Slide Imaging System | *Python, PyTorch, OpenCV* **GitHub Repo Link**

- Designed and implemented a **deep-learning autofocus model** for whole-slide imaging, achieving **±0.002mm focus accuracy** across multi-resolution slides.
- Developed an **optimal algorithm** which is used for capturing whole-slide images enabling seamless stitching.
- Optimized memory and I/O pipelines to generate **pyramidal OME-TIFF files**, reducing processing time and cutting peak RAM usage to run on **NVIDIA Jetson**.

Positions of Responsibility

GNU/Linux Users Group | *Senior Developer* | *Python, ReactJS, AI/ML*

- Mentored **200+ students** in events like **Open Source Starter Pack, ML Workshops**, and **Ten Days of Code**, applying **Agile practices** such as sprint-based planning and iterative feedback, boosting participation by **30%**.
- Independently executed community initiatives while managing the group's **digital presence** through **Scrum-style reviews**, driving a **25% growth in engagement**.

Skills

Languages	C/C++, Python, SQL, JavaScript, HTML
CS CourseWork	Data Structures and Algorithms, Operating Systems, Database Systems, Object Oriented Programming
Frameworks	ReactJS, Node.js, Express.js, MongoDB, LangChain, ChromaDB, TensorFlow
Tools & Platforms	AWS, Git/GitHub (CI/CD), MySQL, BeautifulSoup, OpenCV, Power BI, Tableau
Data Analysis	Pandas, NumPy, Scikit-Learn, Matplotlib, Seaborn, MS Excel
Non-Technical Skills	Effective Communication, Collaboration, Time Management

Achievements

- Flipkart GRiD 6.0 & 7.0 **National Semi-Finalist** (Software Development Track).
- Completed **Google's Gen AI** course on LLMs, prompt engineering, and a hands-on capstone project.
- Reliance UG Scholar (Top 5% in entrance ranking, AIR 5000).
- Cleared the AMCAT Exam and earned the **FFE Scholarship** for academic excellence.

Certifications

Supervised Machine Learning by DeepLearning.AI

Postman API Fundamentals Student Expert

Coding Platforms

Solved over **200+** problems across platforms like **LeetCode**, **GeeksforGeeks**, and **CodingNinjas**.