RAM PRAKHYATH ANNAMAREDDY

✉ ram.annamreddy25@gmail.com

RamPrakhyath05

Ram Prakhyath Annamareddy

📞 +91 6364800996

EDUCATION

PES University (2023-27), Bangalore, India
BTech. – Computer Science & Engineering (CGPA – 7.92)
    Certifications:
- Next.js 13: Your Odyssey into Full Stack Mastery – Awarded Distinction Certificate.
- OS Fundamentals and Linux – Achieved Distinction Certificate.

EXPERIENCE

Summer Intern - *CoDMAV (Centre of Data Modelling, Analytics and Visualization), PES University*
    AI-Powered Doctor Portal
    [Tech Stack: React.js (Vite), FastAPI + Uvicorn (Backend), PyTorch + scikit-learn (ML), Gemini (LLM), SHAP (Explainability)**]**
    [Supporting Tools: NumPy, Pandas, Matplotlib, Pillow, pypdf, Requests**]**
- Developed a multimodal doctor assistance portal with Gemini-based medical triage, symptom clarification, and real-time prescription generation.
- Built a CNN-based disease classifier with SHAP-style interpretability to provide per-symptom contribution scoring and transparent medical reasoning.
- Integrated PDF patient report parsing to auto-extract age, gender, and past medical history for personalized, context-aware diagnosis.

SKILLS

Languages	:	Python, C, C++, Go, HTML, CSS, JavaScript, SQL
Technologies	:	Git, Vim, Linux (EndeavourOS: Arch-based), Edge-TTS
Frameworks & Libraries	:	MERN Stack, FastAPI, PyTorch, scikit-learn, google-generativeai, Vosk (Speech-To-Text), Ollama (Local-LLM Serving)
Tools	:	GitHub, Jira, Postman, Vercel

PROJECTS

1. **A real-time collaborative P2P markdown editor** *[Tech Stack: Next.js, Y.js, Tiptap, IndexedDB, WebRTC, WebSockets]*
   - Working on building a collaborative real-time markdown editor on top of TipTap (based on ProseMirror).
   - Integrating Y.js for Conflict free Replicated Data Type (CRDT) based state management.
   - Peer-to-peer collaboration establishment with a custom signaling server for data reflection.
   - Implementing "offline-first functionality" - to store changes locally in IndexedDB and merging them upon reconnection.

2. **Voice-Activated Multitasking Assistant [***Tech Stack: Python, Vosk, Llama-3, Edge-TTS, AsyncIO, mpg123]*
   - Developed a fully voice-controlled desktop assistant for Linux that performs real-time speech recognition, natural-language reasoning, and task automation.
   - Integrated Vosk for wake-word detection and speech-to-text processing, coupled with Llama 3 running locally via Ollama for on-device natural-language understanding.
   - Implemented a fully asynchronous TTS streaming pipeline using Microsoft Edge-TTS and mpg123 for low latency audio playback.
   - Enabled system-level automation, and application control through a modular command engine.
   - Optimized for zero-UI, terminal-based usage which is ideal for low-resource or headless systems.

ACHIEVEMENTS & HACKATHONS

- Took part in Hacknight 7 (2025), a hackathon held by ACM PESUECC in which 100+ students took part and placed 6th in the leaderboard.
- Grabbed the 2nd prize at Heal-O-Code 2.0, an overnight hackathon held on 28th and 29th March 2025 by the Centre of Data Modelling, Analytics and Visualization (CoDMAV) & WEAL of PES University, Electronic City Campus.
- Took part in Codefusion 24', a hackathon held by IEEE in which 50+ teams took part and placed in the top 20 teams.
- Took part in Override 23', a hackathon held by Google Developer Student Club (GDSC) & placed in the top 10 teams.