ANKIT RAJ

Software Developer & Open-source Contributor

Software Developer with 3+ years of professional and part-time experience in backend engineering, API development, and scalable system design. Open-source contribution with 2M+ downloads in projects. Skilled in Python, FastAPI, PostgreSQL, and vector search technologies. Passionate about building efficient, user-centric applications.

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EDUCATION

B.Tech in Computer Science and Engineering
Dr. A.P.J. Abdul Kalam Technical University
📅 Sept 2020 – Sept 2024 📍 Gaziabad, INDIA

Summer Schools on Digital Platform
Aalto University
📅 14 Aug 2023 – 26 Aug 2023 📍 Helsinki, FINLAND

EXPERIENCE

Software Development Engineer
Aveti Learning Pvt. Ltd.
📅 July 2024 – Ongoing 📍 Bhubaneswar, INDIA

- Dignifi: Designed and developed a platform for connecting ex-prisoners with housing, education, and employment resources for a US client.
- Info-Search: Engineered a scalable search engine using vector embeddings, making 100,000+ contents to be retrieved with a sub-second latency.

Software Development Part-Time
Aveti Learning Pvt. Ltd.
📅 Jan 2021 – June 2024 📍 Bhubaneswar, INDIA

- Smart Class App: Designed and deployed a PyQt-based desktop application used across 1,400 schools in Odisha to deliver digital classroom content, reducing manual content distribution time by 80% and improving lesson accessibility for 200K+ students..
- PPT-Translation: Developed the back-end in Flask with MySQL as database, served to 1200+ teachers in India for reviewing contents created by the Content developers.
- Document Assets Management: Built a Flask + PostgreSQL backend using pg-vector to semantically index 140K+ media assets, cutting asset search time and boosting team productivity.
- E-Library: Designed and Benchmarked with 10k users, an offline content delivery software served to 600 students in villages that runs on Raspberry Pi.

PROJECTS

- **PyWhatKit:** Developed a popular Python library with 2 million+ downloads that automates WhatsApp messaging scheduling and other tasks, simplifying daily automation for thousands of users. (GitHub Link).
- **Deep-Live-Cam:** Contributed to one of the most popular deepfake tools with 50k stars on GitHub, resolved critical build failure on Mac Intel chips. (GitHub).
- **HomeworkMachine:** Created a tool that converts computer-generated text into handwritten-style characters using image processing, automating homework generation for 10,000+ active users. (GitHub).
- **PhotoCluster:** Using scikit–learn for KMeans clustering and Qdrant database for vector similarity search, made the Phone's gallery clustered and semantically searchable using just text.(GitHub).

SKILLS

Languages & Tools

Python NodeJS Go JS
RaspberryPi Electron QT
Docker Linux AWS Heroku
Git GitHub

Backend & Databases

Django Flask Express FastAPI
ORM Nginx MySQL PostgreSQL
MongoDB Qdrant Redis

Data Formats & Methods

Embedding Vector Search JSON
XML YAML

CERTIFICATES

- AI Agents Fundamentals by Hugging-Face **(Completed Feb 15, 2025)**
- Get started with Redis by Redis University **(Completed May 28, 2024)**
- LEARNING PATH | Redis AI & Vector Technical by Redis University **(Completed June 01, 2024)**
- Redis streams by Redis University **(Completed May 31, 2024)**

ACHIEVEMENTS

- Led a 5-member team to 1st prize among 50+ teams at ADGITM IPU Hackathon, developing a solution for ambulance routing. **(Oct 13, 2022)**
- Key contributor in a 4-person team winning 1st prize at DTU Hackathon, focusing on AI-driven solutions for rural kids. **(Feb 2023)**
- Secured 3rd prize in college-wide idea pitching competition, presenting a solution for using computer by handicapped.
- Awarded a sponsored trip to Finland for outstanding performance and contribution at current employer. **(Aug 2023)**