

Chirag Manish Bolakani

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EDUCATION

Vellore Institute of Technology, Vellore, India

Sep 2022 - Jun 2024

Masters of Computer Applications (MCA)

CGPA 8.93/10

K. C. College, University of Mumbai, Mumbai, India

May 2019 - Jun 2022

Bachelors of Science in Information Technology (B.Sc IT)

CGPA 9.5/10

RELEVANT WORK EXPERIENCE

SpotinfoAI (Remote)

Aug 2024 - Present

Software Development Engineer

- Developed a robust **Django** backend with **100+ REST endpoints**, integrating **JWT & Google OAuth2** for secure authentication and asynchronous **WebSocket** and **HTTP Streaming** handling via Python **generators**.
- Optimized LLM response times by over **60%** (8s to 3s) using performance tuning and **Redis** caching.
- Integrated **Amazon S3** and **Google Drive API** into the application.
- Built a **FastAPI** service for managing **Livekit** rooms, enabling real-time voice communication. Deployed **Uvicorn server on EC2** (NGINX) and containers on **Google Cloud Run** for scalable production environments.

Nokia Networks, Chennai, India (In-Office)

Aug 2023 - May 2024

Research and Development Intern

- Built a **Django**-based regression testing site with **automated test re-runs** and bulk comment updates, powered by a trained **KNN** model.
- Built a CI/CD pipeline in **Jenkins** for **ML-Ops** tasks (data collection, cleaning, pre-processing, and training), hosted Django ML backend on **Docker** with **mod_wsgi** and **Apache** on a **Rocky Linux** server.
- Developed visualization and analytical tools for **processing Broadcom Distribution Point Unit (DPU) logs**, enabling the **identification of anomalies** associated with **critical bandwidth issues**.
- Led effort-reduction initiatives, achieving a **25% decrease in manual interventions**.

TECHNICAL PROJECTS

1. DocGenie [\[Link\]](#)

Feb 2025 – Mar 2025

- Developed a **RAG** based AI app for document processing using **Django**, **Celery** for task execution, **PostgreSQL**, **ChromaDB** as vector storage, and **Redis** for caching.
- Dockerized** and deployed on **Google Cloud Run** for scalable and efficient performance.
- Implemented **HTTP Server Side Events (SSE)** to deliver real-time responses to user queries.
- Achieved an average **Time to First Byte (TTFB) < 2s**, ensuring consistently fast query responses.

2. Chill-Pill [\[Link\]](#)[\[Github\]](#)

May 2024 – Jun 2024

- Built a JavaScript-based music streaming app with Node.js server supporting **HTTP 206 Partial Content streaming**. **No external dependencies**.
- Developed **NodeJs** server that supports **HTTP 206 Partial Content Streaming**. Created responsive UI with Vanilla JS, deployed on AWS using **Docker** for backend (Node.js) and frontend (**Apache**).

3. Human Presence Detection Using RF Signals [\[Link\]](#)

Oct 2022 – Jan 2023

- A Collected **Received Signal Strength Indicator (RSSI)** from Esp32 and applied various **statistical** parameters over the RF Signal and successfully detected the presence/absence of a Human in a controlled environment.

4. Lung Capacity Check – Spirometry for Pulmonary Function Test [\[Github\]](#)[\[Link\]](#)

Oct 2021 – Apr 2022

- Innovated a low-cost solution to calculate **Spirometry parameters** by leveraging **Bernoulli-Venturi Principle** as well as performs **Incentive Spirometry**. Utilised MongoDB and Matplotlib to analyze the patients' results.

SKILLS

- Programming Languages:** Python, Java, Javascript
- Database Technologies:** MySQL Server, PostgreSQL, Oracle DB,
- Web Technologies:** Django, Django Rest Framework, Node.js, Express.js
- Python libraries:** NumPy, Pandas, Matplotlib, Plotly, Flask
- Dev-Ops:** Docker, Apache, Jenkins

ACADEMIC HONORS/AWARDS

- Best Project Award, Code for Life Hackathon, VIT Vellore (2023):** Won among 100+ teams, 400+ students.
- My Applied Science Contest, VIT Business Incubation Center (2023):** Secured 3rd place in an inter-department innovation contest.
- Team Leader, Project DeepBlue, Mastek (2022):** *2nd Runner Up at Mastek's Deep Blue Season 7 among the 282 registered team.*
- Team Leader, Devsoc'21, CodeChefVIT, VIT (2021):** Won Devsoc'21 among 500 teams nationwide.
- Team Leader, SIH Internal Hackathon, KC College (2022):** Led the team to 2nd place at SIH KC Internal Hackathon.