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

Nokia Networks, Chennai, India (In-Office) **Aug 2023 - May 2024**
Research and Development Intern

- Engineered **Django**-based website for regression testing; enhanced with **auto re-run of tests** and **bulk comment updates.**
- Built **CI/CD pipeline** using **Jenkins** for seamless **ML-Ops** such as data collection, cleaning, pre-processing and training. Hosted Django **ML backend** with **mod_wsgi and apache** inside **Docker** container on an on-premises **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**.
- Successfully spearheaded the implementation of effort reduction strategies, resulting in a **25% decrease in manual intervention** in the team.

TECHNICAL PROJECTS

1. Chill-Pill [[Link]][[Github]] **May 2024 – Jun 2024**

- Music streaming app written in Javascript with **no external dependencies**.
- Developed **NodeJs** server that supports **HTTP 206 Partial Content Streaming.**
- Created **responsive** and interactive UI purely using **Vanilla Javascript**.
- Deployed on **AWS** with the **NodeJS** Backend running inside a **docker** container and Frontend behind **apache docker** container

2. React-Notes [[Link]] [[Github]] **July 2024**

- Developed a dynamic notes application in **React**, integrating **React Router** for navigation and utilizing hooks like **useState, useEffect, useParams, and useNavigate** for efficient state and lifecycle management.

3. Vendor Management System [[Link]] **Apr 2024 – May 2024**

- This backend provides required routes to implement a Vendor Management System. Utilised **class-based** views in **Django-rest framework**. Endpoints are authenticated using **JSON Web Tokens (JWT).**
- Utilised Django **Signals** to trigger updating of the vendor performance metrics on each modification.

4. Task Scheduler App [[Link]] [[Github]] **Mar 2024 – Apr 2024**

- A Built a task management application using Django and **django-rest-framework** with REST **API**, secured via **JWT** Authentication; hosted on **AWS with Docker**.

5. 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 an controlled environment.

6. 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, Oracle DB, MongoDB
- **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** **May 2023**
  Awarded for the Best project award amongst more than 100 registered teams and 400+ students.
- **My Applied Science Contest, VIT Business Incubation Center** **Mar 2023**
  Secured 3rd position amongst various students in the inter-department Innovation contest.
- **Team Leader, Project DeepBlue, Mastek** **Oct 2021-Mar 2022**
  2nd Runner Up at Mastek's Deep Blue Season 7 among the 282 registered team.
- **Team Leader, Devsoc'21 , CodeChefVIT, Vellore Institute of Technology** **Apr 2021-May 2021**
  Won Devsoc'21 among 500 teams participated from all over India.
- **Team Leader, SIH Internal Hackathon 2022, KC College, Team Rand0m6** **Feb 2022-Mar 2022**
  Spearheaded the team to 2nd Position at SIH KC College Internal Hackathon.