Ayush Ranjan

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Experience

Capgemini Technology Services India Limited **Oct 2022 – Aug 2023**

Associate Consultant *Mumbai, India*

- **Role**: Java Developer **Client** :Mercedes-Benz Research and Development India
- Designed, implemented, and maintained Java features, employing design patterns while performing code reviews.
- Implemented an innovative approach alongside the existing process, a micro frontend architecture, which streamlined a complex procedure. This allowed users to make specific changes independently while retaining the old process. This change dramatically enhances efficiency and user experience. Earned **3rd place** among 60 competing groups at **Innocircle 2022, Mercedes' Internal Innovation forum**
- Restructured Expoprt test cases via XML file import strategy and sorting, cutting export testing time by **40 percent**.

Capgemini Technology Services India Limited **July 2021 – Sep 2022**

Senior Analyst / Senior Software Engineer *Mumbai, India*

- **Role**: Java Developer **Client** : Mercedes-Benz Research and Development India
- Conducted software analysis, programming, testing, and debugging. Wrote well-designed, efficient and testable code.
- Collaborated closely with the data model change team to enhance the functionality and adaptability of XDIS (Cross-platform Data Information System), a critical tool for vehicle diagnostics and automatic driving scenarios
- Dramatically optimized XML file migration time by an impressive **66.67 percentage**. Additionally, enhanced the tool's robustness by concurrently implementing indexing strategies for associated IBM Db2 database tables.

Capgemini Technology Services India Limited **Jan 2021 – May 2021**

Senior Analyst Intern / Senior Software Engineer Intern ***Role****: Java Full Stack Developer* *Pune, India*

- **Led a team of 6 interns** in developing a Medical Portal using Spring Boot for the backend and React for the frontend. Seamlessly integrated frontend and backend via **Axios**. Utilized **JUnit** for backend and **Jasmine** for frontend testing.
- Implemented distinct user roles (Admin, Doctor, Patient) to streamline appointment booking, doctor profile viewing, and medical history management for patients, while enabling doctors to review histories and prescribe treatments.

Education

University of California, Santa Cruz **Sep 2023 – Present**

Master of Science in Computer Science *GPA: 3.65/4*

Manipal University, Jaipur **July 2017 – May 2021**

Bachelors of Technology in Information Technology. *GPA: 8.03/10*

Technical Skills

Programming Languages and Frameworks: JAVA, Python, SQL, C, PyTorch, Spring Boot, Flask, JUnit, JDBC, React, Javascript, HTML, Hibernate, Keras, MySQL, PostgreSQL, DB2, MongoDB, Pandas, Numpy
Software Development Tools: Github, Docker, Kubernetes, Log4j, Jenkins, Papyrus, Jira, Azure, Eclipse, VsCode, Vim
Selected Coursework: Advanced Data Structure, Analysis of Algorithms, Design and Implementation of Database Systems, Advanced Machine Learning Techniques, Operating System, Applied ML: Deep Learning, Advanced Computer Network

Selected Projects

Video to Mp3 Converter | *Flask, Docker, Kubernetes, RabbitMQ, MongoDB Github* **Dec 2023**

- Developed a microservices-based system with four services, including an authentication gateway, authorization service, video upload service, and converter service. The gateway authenticates users via an authorization service, generating JWT tokens for valid users, enabling secure video uploads. Video-to-MP3 conversion was facilitated using the Python library "moviepy".
- Employed asynchronous communication using RabbitMQ queues to facilitate seamless video processing and conversion to MP3.
- Utilized Docker for containerization, Kubernetes for orchestration, and Minikube for local development, ensuring consistent and scalable deployment across environments.

Sentiment Analysis using CNN | *Pytorch, TorchText, Jupyter Notebook Github* **Jan 2020 – May 2020**

- Implemented a **neural network model using CNN** to analyse the sentiment of Text.
- Our final model provided us with a test accuracy (in percentage) of 87, validation accuracy of 89, and training accuracy of 88, and this project earned me **A+ grade in my Minor Project**.

Facial Attendance System | *OpenCV, Python, Tkinter, gTTS, Playsound Github* **Aug 2019 - Nov 2019**

- Developed a facial attendance system employing advanced recognition to log known individuals' attendance with date and time, while also facilitating historical retrieval using names.
- Elevated user interaction by integrating Google Text-to-Speech technology to deliver personalized welcome messages to recognized individuals.

Certifications

AZ-900 Certification (2022): Secured 940/1000.

Introduction to Compiler Certification (2019): Course focused on compiler construction and design.

SQL Fundamentals by SoloLearn (2019): Course on SQL scripting.