

# AYUSH RANJAN

☎ (831)266-5973 ✉ [aranjan1@ucsc.edu](mailto:aranjan1@ucsc.edu) 💻 [ayuranjan](#) 🌐 Website 📱 [ayuranjan](#)

## 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 greatly enhancing efficiency and user experience. Earned **3rd place** among 60 competing groups at **Innocircle 2022, Mercedes' Internal Innovation forum**
- Worked on innovative concepts to optimize project efficiency, leading to a remarkable **40 percentage reduction** in export testing time.

### 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 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**
- 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: N/A

### Manipal University, Jaipur

July 2017 – May 2021

Bachelors of Technology in Information Technology.

GPA: 8.03/10

## Technical Skills

**Programming Languages and Technologies:** JAVA, Python, SQL, MySQL, PostgreSQL, C, PyTorch, Keras, JUnit, React, Javascript, HTML, XML, CSS, Hibernate, JDBC, Spring Boot, Axios, Fetch, AJAX

**Software Development Tools:** Github, Log4j, Jenkins, Papyrus, Jira, Azure, Eclipse, VsCode, Agile

**Selected Courseworks:** Advanced Data Structure, Analysis of Algorithms, Relational Database Management Systems, Advanced Machine Learning Techniques, Operating System, Storage Systems, Advanced Computer Network

## Selected Projects

### 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**.

### Covid-19 Detection from CT-Scan | Keras, Tensorflow, Matplotlib, Google Colab [Github](#)

June 2021

- Developed a standalone Convolutional Neural Network (CNN) using Keras to discern COVID-19 presence in a CT dataset of 350 images from 219 individuals.
- Designed a CNN architecture with 4 convolutional layers, incorporated data augmentation and dropout techniques to address overfitting, and employed binary cross-entropy for precise loss calculation

### Facial Attendance System | OpenCV, Python, Tkinter, gTTS, Playsound [Github](#)

Aug - 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.