

ASEEM BARANWAL

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EDUCATION

University of Florida

Expected May 2024

Masters of Science in Computer Science [GPA - 3.6/4]

Gainesville, FL

Courses : Advanced Data Structures, Computer & Network Security, Computer Networks, Distributed Operating Systems, Visualization, Algorithms

Madan Mohan Malaviya University of Technology

Jul 2021

Bachelor of Technology in Computer Science & Engineering [GPA - 8.2/10]

Gorakhpur, India

Courses : Operating Systems, Software Engineering, Data Structures, Computer Architecture, Database Management, Web Design, Cloud Computing

TECHNICAL SKILLS

Programming Languages: Java, Python, C++ , JavaScript, TypeScript, Erlang

Web Technologies: .NET, Spring MVC, SpringBoot, HTML5, CSS3, ReactJS, Typescript, Flask

Tools: Azure, OpenAI, Tableau, REST, Jira, Blender, Postman, Git, Linux, Visual Studio, SQLDeveloper, SparkAR

ML Libraries: Scipy, Numpy, OpenCV, Keras, Tensorflow, Pandas, Scikit, Seaborn, NLTK

EXPERIENCE

University of Florida | Python, GPT, ChromaDB, Langchain, MySQL, OpenAI

Jun 2023 - Present

Artificial Intelligence Developer

Gainesville, FL, USA

- Innovatively crafted AI pipeline utilizing LLM & transfer learning on **fine-tuned** GPT models employing **OpenAI APIs** to standardize multilingual medical terms into standardized English equivalents with an accuracy of **78%**
- Engineered vectorized database & and used **embedding** distances with Langchain & LLMs boosting accuracy by 60%
- Spearheaded **100+ SQL queries** to assess the data quality across 25+ tables enabling 100% data-quality reporting

CloudNuro.ai | Python, FastAPI, Typescript, React.js, PostgreSQL

May 2023 - Aug 2023

Software Engineer Intern (Part-time)

Remote

- Designed multithreaded **SDK** using Python and FastAPI, & PostgreSQL streamlining interactions with external APIs helping generate revenue from 20+ clients
- Optimized retrieval applying **Redis** cache & implemented **React.js** to craft an interactive dashboard resulting in 40% speedup

Tata Consultancy Services | Java, SpringBoot, Azure, Hibernate, PL/SQL, ReactJS

Jul 2021 - Jul 2022

Software Engineer (Full-time)

Bangalore, KA, India

- Developed pricing and workflow microservices for an ERP-based web-application utilizing Java, Spring, Hibernate, SpringBoot & ReactJS in an **agile** setting increasing application efficiency by 37%.
- Optimized the code queries in Hibernate with **lazy-loading** resulting in fast processes with increased speed by 100%.
- Spearheaded code for **3 core modules** with documentation & integrated it with external systems using REST API
- Created BI-enabled materialized views and increased the **code coverage criteria** to 95% reducing bug reproducibility

KEY PROJECTS 🌐 [GITHUB: ASEEMBARANWAL]

QuizApp - Microservices-Powered Quiz Platform | Java, Spring Boot, PostgreSQL, Eureka

Learning Project

- Developed a web-authenticated scalable microservices-based quiz app using **Spring Boot** & **PostgreSQL** database
- Designed micro-services with API gateway using **Eureka**, enabling **dynamic scaling** and **load balancing** for best performance

Distributed Twitter Clone | React.js, SQL, Erlang, socket, Actor, Cowboy

Academic Project

- Pioneered Twitter Clone using **Erlang and Actor model** to make a distributed social-media clone on **cowboy Framework**
- Introduced a multiple JSON-based API to retrieve the Tweets, Subscribers, queries, and replies from the ETS table in accordance with Zipf distribution. Tested the simulator for 90k users.
- Implemented web-authentication and used **web-sockets** & **socket-programming** to send & receive web responses

Library Management System | C++ , Red Black Tree, Algorithms

Data Structures

- Constructed a Library Management System in C++ , employing advanced Red-Black Trees to optimize book management.
- Designed a priority-based book reservation system to streamline reservation handling & optimized resources usage by 89%

Log Data Visualizer | Python, Tableau, NLP, SCSS, React.js

Research Project

- Built a dynamic Tableau Web-app for data analytics on log data, & achieved a remarkable **100x** reduction in data exploration
- Utilized Natural Language Processing on **40000+ records** with a test accuracy of **94%** to classify & predict log categories

ACHIEVEMENTS & EXTRACURRICULAR

- Problem Solving**: **6-star** rating in Algorithms on Hackerrank, solved 550+ questions on Leetcode, best **ranking 1498** globally
- Teaching Assistant**: Taught C++ Data Structures & Algorithms helping 125+ students in app design, with a rating of **4.8/5**
- Leadership**: Former **Secretary** and **Treasurer** at Entrepreneurship Cell, MMMUT, and conducted hackathons and coding classes