# Utsav Parajuli



uparajuli07@gmail.com | GitHub | in LinkedIn |







Website

# **SKILLS**

Programming Languages: (proficient): Java, C++, Python, C#, HTML/CSS (familiar): JavaScript, TypeScript, SQL Tools / Frameworks: (proficient): AWS(S3, EC2, Lambda), MySQL, Android, Linux, Git, Blazor, .NET (familiar): PostgreSQL, Angular, Kafka, React.js, Docker, scikit-learn, CircleCI, Tableau, Alteryx, Mockito

#### **EXPERIENCE**

## **ALTERYX**

Software Development Co-op

January 2023 - June 2023

- Designed and implemented an automated application and data pipeline for calculating Alteryx's annual greenhouse gas emissions, reducing labor cost and time by 25%.
- Collaborated with the ESG team to modularize pipeline code and automate testing, increasing the pipeline efficiency and improving accuracy of results by 15%.
- Employed Tableau to visually represent data, enhancing accessibility and effectiveness of result interpretation.
- Leveraged knowledge in Python, R, Alteryx Designer, Tableau, Google Cloud Platform

## **AGIL SOLUTIONS - Remote**

Software Development Intern

*June* 2021 – *September* 2021

- Developed a web portal for a client using C# and the Blazor WASM framework with an ASP.NET backend.
- Worked with existing backend API and database schema to build new components.
- Optimized new and existing REST queries to improve site performance and responsiveness by 35%.
- Utilized the CircleCI pipeline to facilitate the integration of multiple changes to the core codebase, as well as the automation for deployment of version updates.
- Collaborated with team members in daily standups and weekly deliverables while using agile methodology.
- Leveraged knowledge in Git, C#, JavaScript, HTML/CSS, REST API, Blazor, React.js, ASP.NET, CircleCI

#### **PROJECTS**

# MULTI-THREADED DISTRIBUTED SYSTEM BASED ONLINE GAME

- Developed a full-stack network-based multiplayer game in Java with a scalable infrastructure.
- Designed the backend using the microservice architecture to assimilate independently operating modules to ensure minimal downtime and optimal scalability.
- Implemented a custom messaging queue to facilitate communication in real-time between the different services.
- Developed and implemented a server architecture that included a robust network structure and thread pool management for managing large network load.
- Created and hosted a PostgreSQL database on the cloud for storing user data and game statistics.
- Utilized: Java, Microservices, JavaFX, PostgreSQL, AWS EC2

# ONLINE MOVIE DATABASE APPLICATION

- Fully built architecture from scratch, similar to IMDb, allowing users to browse, search, and purchase movies.
- Implemented a large frontend using JavaScript, iOuery, and Ajax while administering the same functionality in an Android application using the same backend API.
- Developed an ETL pipeline to parse large XML files to augment the already large MySQL database.
- Improved website performance by 35% by implementing optimizations including: MySQL connection pooling, MySQL replication, and Apache load balancing.
- Utilized: Java, JavaScript, ¡Query, AWS, HTTPs, Apache, ¡Meter, JDBC, MySQL, AJAX, RESTful APIs, Android

## **SEARCH ENGINE**

- Developed a Web search engine in Python capable of handling thousands of Web pages, under harsh operational constraints and having a query response time under 300ms.
- Implemented an inverted index, vector space model, tf-idf factor, cosine similarity score, MapReduce paradigm and distributed query evaluation.
- <u>Utilized</u>: Python, Flask, MapReduce paradigm

## **EDUCATION**

December 2023

Bachelor of Science in Computer Science

GPA: 3.84