

EDUCATION

University of Washington.

Bachelor of Art in Mathematics

Courses: Data Structures, Intermediate Algorithms, Data Analysis, Database System, Web Development, Software Engineering

Fall 2020 – 2024

GPA3.71/4

SUMMARY

A program with strong background in Mathematics, and a wide range of project-development including full stack web application development with Java, Rest, Spring, AWS and Azure.

PROJECTS

Twitch+: A Personalized Twitch Resources Recommendation Engine

May 2022 - Present

- Designed and built a full-stack web application for users to search twitch resources and get recommendations.
- Built a web page with rich and user-friendly experience using **React** and **Ant Design**.
- Implemented **RESTful APIs** using Java servlets, retrieved real Twitch resources using **Twitch API** and stored data in **MySQL**.
- Support login/logout and favorite collection.
- Explored multiple recommendation algorithms and extracted game information from Twitch resources to implement a Content-based algorithm.
- Deployed the service to **AWS EC2** for better stability.

Staybooking: An online stay rental application based on React and Spring Boot.

Apr 2022 - Present

- Designed and built a single page web application using React. Bootstrap the development with mature component library **Ant Design**.
- Implemented the backend services based on **Spring Boot** to support stay upload, delete, search and reserve functionality.
- Used **MySQL** to store user-generated data, store information and reservation history, and utilized **Google Cloud Storage** to store media files for the uploaded stays.
- Created geo index by Elasticsearch to support geo-based stay search based on user's selected locations.

Starlink: React JS based Starlink Trajectory Visualization.

Jan 2022 – May 2022

- Designed and developed a visualization dashboard using **ReactJS** and D3 to track satellites in real-time based on geo-location.
- Built location, altitude, and duration-based selector to refine satellite search.
- Animated selected satellite paths on a world map using **D3** to improve the user friendliness.
- Deployed the dashboard to Amazon Web Service for demonstration.

House Market Webapp

Fall 2021

- Individually designed and implemented a webapp, which allows users to list, rent, sell, and buy properties.
- Created a Mobile-First UI with **React**, and **Daisy UI**.
- Implemented the user profile and authentication system with **Firestore** and **Google OAuth**.
- Used **MongoDB**, and Firebase Storage to store data and images to create the backend
- Used the Geocoding API to provide geographic coordinates and show the location on map for the addresses that users provided for their properties.