

Julia Ball

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Education

University of Washington- BS in Computer Science

Anticipated Graduation: Spring 2022

- GPA: 3.87
- Dean's List Autumn 2018-Spring 2020
- Relevant Coursework:
 - Data Structures and Parallelism
 - Foundations of Computing I and II
 - Introduction to Data Science
 - Software Design and Implementation
 - The Hardware/Software Interface (in progress)
 - Programming Languages (in progress)

Work Experience

Teacher's Assistant- *Introduction to Data Science*

APRIL 2020-JUNE 2020

- Assisted with grading, teaching section and answering student questions.
- Prepared materials for section reviewing class topics such as statistics and data science concepts and using Tableau and BigML.
- Helped adapt class structure to online format.

Student Assistant- *University of Washington Integrated Services Center Reporting Department*

AUG 2019 - APRIL 2020

- Assisted with report creation and maintenance in Workday.
- Performed data analysis and calculations using Tableau and Excel.
- Analysis used to direct Reporting Adoption Project, created instructional documents to be used in other departments.

University of Washington Transportation Services

JUNE 2019 - AUG 2019

- Assisted customers with parking and directions on the University of Washington campus.
- Provided quality customer service in a fast-paced environment.

Volunteer Tutor- *Pipeline Project*

MARCH 2019 - JUNE 2019

- Helped students with classwork in Algebra and Precalculus classes at local high school.

Skills

- *Proficient with:* Java, React, JavaScript, Command Line, Tableau, Excel, GitHub/GitLab
- *Experience with:* Python, C++, HTML, CSS, SQL, Android Studio, Kotlin, Bootstrap, jQuery, MongoDB

Projects

Polynomial Calculator (Java) – *Software Design and Implementation*

- Implemented the backend for a calculator that can add, subtract, multiply, divide, differentiate and integrate rational polynomials.

HuskyMaps V2 (Java Spark, React, Java, JavaScript) – *Software Design and Implementation*

- Designed, produced and tested a web application that used breath-first search and graphs to find the shortest path between locations at the UW.
- Created server and UI for the application.

HuskyMaps V1 (Java) – *Data Structures and Parallelism*

- Developed the backend of a map web application for navigating the UW campus, using Dijkstra's algorithm.
- Implemented autocomplete feature in the search bar and zooming to fit different sections of the map
- Used multiple threads to increase performance.

Seamcarver (Java) – *Data Structures and Parallelism*

- Created application for finding rows and columns within an image to remove without altering the picture.
- Used A-Star search to compare the color of adjacent pixels to determine which rows and columns can be removed.

StudyBuddy (React, JavaScript)

- Designed and created a customizable Pomodoro timer web application used for studying.

CodeDay Hackathon Project (Java, Android Studio)

- Collaborated with a team to create a mobile application to store and organize Dungeon and Dragons character information.

References available on request.