

# Ryan Bartruff

## Computer Science, University of Washington

rcsbartruff@gmail.com

650 823 6898

rbb2.github.io

Seattle WA

### Education

#### Bachelor's degree Computer Science

University of Washington 2015 – 2019

Graduating end of Fall 2019, 3.71/4.0 GPA

### Experience

#### Software Intern FCP Insight

Jun 2018 – Sep 2018 Greater Seattle Area

Created a dashboard to calculate and visualize sales statistics and provided instant access to construction bids and sales

Improved the performance of the data access via custom caching and bottleneck elimination

Technologies used including Java, SQL, HTML, and CSS.

#### Instructor iD Tech Camps

Jun 2016 – Aug 2017 Palo Alto, California

Designed weekly lesson plans to teach students how to build and program Lego Mindstorm robots.

Lead camp activities with upwards of 100 students, and managed class rooms of 32 students

### Projects

#### Cozmo Robot

Used an open source library to apply edge detection, Hough transforms, and Haar Cascades to identify faces and shapes

Controlled robot movements using coordinate transforms. Used value iteration to solve Markov Decision Processes

#### Website (rbb2.github.io)

Created a personal website using JavaScript, Bootstrap, HTML, and CSS

#### UW Campus Map

Created a campus direction map from scratch using a graph implemented as an adjacency list and Dijkstra's algorithm to find the shortest path between 2 locations on campus

#### Hackathons

An iOS app that sends money to charity if you snooze an alarm using Venmo's API

A web-based application that recommends an outfit based on weather conditions and style matching

### Courses

Data Structures & Parallelism

Data Visualization

Foundations of Computing I, II

Database Management

Hardware Software Interface

Software Design and Implementation

Robotics (Graduate Level)

Artificial Intelligence Udacity

### Activities And Awards

Dean's List 2015–2018

HuskyInnovate 2017 1st place  
April 2017

Team Captain and Webmaster  
For Robotics

Team Captain  
For Volleyball and Basketball

### Languages

Mandarin Chinese  
Working Proficiency

### Skills

Java



SQL



Unix

