





Aravind Segu

3rd Year Software Engineering Student

 aravindsegu.com
 yasegu@edu.uwaterloo.ca
 (519) 500-5487
 aravind-segu
 aravind-segu

Education

University Of Waterloo 2016 - Present
Software Engineering
Option in Artificial Intelligence
GPA: 3.9/4

Stanford University Jan - Apr 2018
Machine Learning Course

Skills

Languages:

Java, Python, C/C++, PHP, Go, Scala, C#, Octave, JavaScript

Frameworks and Tools:

React, ASP.NET, AngularJS, jQuery, Pandas, Selenium, Flask, Ionic, Unity3D, Elasticsearch

Database and Servers:

SQL, Maven, ApacheTomcat, AWS

Awards & Certifications

Hack The Valley 2018
MLH 3rd Place from 76 Teams

Electric City Hackathon 2017
Top 5 and Recipient of Wolfram Alpha Award

DRW 2018
Outstanding Employee Recognition

Bluejay Networks 2017
Excellent Employee Recognition

Term Dean's Honors List 2018
1A, 2A, 2B

Oracle Certified Associate 2016
Java SE7 Programmer

Work Experience

- Reebee** | Backend Software Engineer Sept 2018 - Present
PHP, Go, MySQL, Elasticsearch
- Redesigned database architecture to **reduce storage space** by 20% and **improve response time** by more than 40% for users
 - Integrated **Sutherland-Hodgman algorithm** to better assign products with images, increasing the probability of a correct match by 60%
 - Utilizing Elasticsearch to develop a **full text search engine** for a database with more than 1 million items
- DRW** | Full Stack Developer Jan 2018 – Apr 2018
JavaScript, Python, React, ASP.NET, MySQL
- Integrated **Dijkstra's algorithm** with google maps to develop a web interface that determines the **shortest network path** which connects data centers across the world
 - Developed and deployed a **single-page web application** to handle data management and configuration of more than 70 web scrapers.
 - Programmed dynamic and flexible **web-scrapers** utilizing Python and Scrapy to collect relevant competitive intelligence information
- Bluejay Networks** | Software Engineer May 2017 – Aug 2017
Java, JavaScript, Angular, MySQL, Ionic, AWS
- Pioneered an **electronic prescription platform** for mobile and web environments
 - Utilized Java EE with the Spring Framework, SQL and AWS to build and deploy backend codebase
 - Developed supporting **Android, iOS** and Web applications utilizing Ionic, JavaScript and AngularJS

Student Design Team

- Watonomous** | Path Planning Team Member Sept 2018 – Present
C++
- Involved in developing an **autonomous self-driving vehicle** for the SAE AutoDrive Challenge
 - Redesigned the **costmap** to integrate various obstacles on the road to reduce latency by more than 70%
 - Responsible for enhancing the **A* algorithm** to calculate the ideal path for the car while obliging with traffic rules

Select Projects

- DriveSafe** Mar 2018 - Present
Python
- Designed a **three-layer neural network** which performs photo recognition to identify different types of impaired driving
 - Implemented **PCA, conjugate gradient algorithm** and regularization to prevent overfitting and improve the rate of training
- Packetty** | Hack The North Sept 2018
Raspberry Pi, Java, Python, Microsoft Azure, Firebase
- An **intelligent security system** built from two Wi-Fi transmitting devices which utilizes Wi-Fi strength to trigger a surveillance camera
 - Integrated Microsoft Azure for **face detection** and Firebase for real time notifications on an android application upon a forced entry