



Aravind Segu

3rd Year Software Engineering Student

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Skills

Languages:

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

Frameworks and Tools:

Apache Kafka, Elasticsearch, Pandas,
Selenium, Flask, Unity3D, Elasticsearch,
React, ASP.NET, Ionic

Database and Servers:

MySQL, PostgreSQL, AWS

Education

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

Stanford University **2018**
Machine Learning Course

Awards & Certifications

Dean's Honors List **2019**
2016 - 2019

Outstanding Intern Award **2018**
DRW, Reebee

Hack The Valley **2018**
MLH 3rd Place from 76 Teams

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

Oracle Certified Associate **2016**
Java SE7 Programmer

Work Experience

Apple | Siri Understanding Software Engineer **May 2019 – Present**
Java, Apache Kafka

- Redesigned **Siri Training Data** systems used by 100s of data scientists, handling over **2.5 TB** of data across **150,000 requests per week**
- Enhanced the **backend architecture** of training data systems to localize data handling logic and **decrease response time** by over **15%**
- Utilized **Apache Kafka** to create a uniform pool of workers to **increase parallelism** when serving training data to **Siri NLP models**

Reebee | Backend Software Engineer **Sept 2018 – Dec 2018**
PHP, Go, MySQL, Elasticsearch

- Restructured and optimized the database architecture to **reduce storage space** by 6% and **improve response time** by more than 20%
- Integrated **Sutherland-Hodgman algorithm** to better assign products with images, increasing the probability of a correct match by 60%
- Utilized **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.

Bluejay Networks | Software Engineer **May 2017 – Aug 2017**
Java, JavaScript, Angular, MySQL, Ionic, AWS

- Pioneered an **electronic prescription platform** for mobile and web environments using the **Ionic** Framework
- Utilized **Java** EE with the **Spring** Framework, **SQL** and **AWS** to build and deploy the supporting backend architecture

Student Design Team

Watonomous | Subteam Lead - Path Planning **Sept 2018 – Apr 2019**
C++

- Involved in developing an **autonomous self-driving vehicle** for the SAE AutoDrive Challenge
- **Led** a team of 10 members to redesign 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