Ashvin Nagarajan

anagarajan25@ucla.edu || www.ashvin.dev || linkedin.com/in/ashvin-nagarajan/

Education:

University of California, Los Angeles (UCLA) 2018 - 2022
B.S. Materials Science and Engineering Cumulative GPA: **4.00** / 4.00

Work Experience:

Cisco Systems | Software Engineering Intern — Summer 2020

Python, Flask, Grafana, InfluxDB, AWS, Docker, Kubernetes, Helm, Prophet API, Scrum

- Created API to scale containers dynamically based on reactive and predictive machine learning
- Obtained estimated cost savings of $2.7M per year by allocating compute resources efficiently
- Deployed production-ready application to Kubernetes clusters in worldwide datacenters
- Developed debug tool to analyze audio routes for more efficient cascade error identification

Booz Allen Hamilton | Software Engineering Intern — Summer 2019

Docker, Kubernetes, AWS, React, Redux, JavaScript, Bash, Git, Agile, Product

- Developed full-stack data visualization tool for single cluster Kubernetes environments
- Software provided insight on the health and performance of AWS cluster with Kubernetes APIs
- Created customizable user interface with streamlined integration for existing clients
- Earned 1st Place Overall out of 80+ intern teams judged by senior leadership team at McLean HQ

Selected Projects:

Super Mileage Vehicle | Technical Director — 2018 – *

React, Redux, Firebase, PCB Design, MCUs, Python, Arduino, FEA, Agile, Jira

- Directed operations of subsystem leads and oversaw 40+ engineers with 10+ concurrent projects
- Implemented rigorous SOPs and improvements made on car, achieving 130+ mi/kwh efficiency
- Developed vehicle data acquisition system w/ embedded sensors for real time analysis of vehicle
- Implemented real-time driver interface to monitor and analyze data from the vehicle on the cloud

Center for Heterogeneous Integration and Performance Scaling | Researcher — 2019 – *

C, C++, Ansys, Circuit Design, PCB Fabrication, Bluetooth L.E., MCUs

- Programmed a prototype gas sensor via microcontroller to detect harmful gasses like CO, CH3
- Published as second author in IEEE ECTC Conference 2020
- Programmed MCUs in C to optimize data transfer over multiple ADC channels at 2kHz frequency
- Coded JS dashboard to visualize data from Bluetooth and present sensor readings in real time

Skills:

Python, MATLAB, Java, C, C++
SQL, InfluxDB, Grafana
SolidWorks, NX, Ansys, StarCCM
Sketch, Figma, Adobe XD
React, Redux, JavaScript
Jenkins, Git, Agile, Scrum, Jira
MCUs and Embedded Systems
Project Management, Communication

Awards and Honors:

1st Place IdeaHacks Hackathon
1st Place Booz Allen Summer Games
Valedictorian of JCHS Class of 2018
Eagle Scout – Boy Scout Troop 6
Published in IEEE ECTC 2nd author
Disney Imaginations Semifinalist
NMSC National Merit Scholar: 2018
National Honor Society: 2016 – 2018