Ashvin Nagarajan

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Education:

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

Selected Projects:

Center for Heterogeneous Integration and Performance Scaling | Researcher   2019 – *
- Designing prototype flexible gas sensor for consumer applications in wearable technology
- Created communication protocol for analog and digital circuits using BLE and NFC
- Programmed proprietary MCUs in C to optimize data transfer over multiple ADC channels
- Fabricating etched sensors and PCBs in clean room environment

Super Mileage Vehicle | Research and Development Lead   2018 – *
- Developed vehicle data acquisition system w/ embedded sensors to create mathematical models
- Conducted mathematical analysis on burn algorithms to improve efficiency to 130+ mi/kWh
- Created driver interface to monitor data in real time with React, Redux, Python, C++, Firebase
- Designed rigorous SOPs to measure efficiency and ensure quality of improvements made on car

Booz Allen Hamilton | Software Engineer   2019
- Developed proprietary data visualization tool for Docker environments with Kubernetes
- Earned 1st Place Overall out of 81 intern teams judged by senior leadership at McLean HQ
- Provides insight on the health and performance of an AWS EC2 Cluster in real time
- Customizable UI for the needs of clients using React, Redux, JavaScript, Enterprise Architect

Creative Labs @ UCLA | Engineering Project Manager   2019 – *
- Leading team of 11 engineers to develop IoT coffee maker with mobile app and MCUs
- Implemented skills and features using React Native, Android, C++, and SolidWorks
- Developed the prototype of an IoT bean bag device by designing circuits and sensors
- Integrated mobile app and Google Home skill to control the electronic functionality

Skills:

React, Redux, JavaScript, Express, JQuery	MCUs and Embedded Systems
Python, MATLAB, Java, C, C++	Analog and Digital Circuits, PCB design
SolidWorks, NX, AutoCad	Data communication and transfer protocol
Sims for Thermal, Structural FEA, CFD	Systems Engineering with Enterprise Architect

Awards and Honors:

Engineering Dean List: 2018 – Present	Valedictorian of JCHS Class of 2018
1st Place Booz Allen Hamilton Summer Games	Eagle Scout – Boy Scout Troop 6: 2016
1st Place IdeaHacks Hardware Hackathon	NMSC National Merit Scholar: 2018
Engineering Fellow – City Fellows Consortium	National Honor Society: 2016 – 2018