# 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
Coursework: Semiconductors, Multivariable Calculus, Characterization, Thermodynamics,

## Selected Projects:

### Booz Allen Hamilton | Product Engineer 2019

- Developed proprietary data visualization tool for Dockerized 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

### Super Mileage Vehicle | Research and Development Lead 2018 – 2019

- Developed vehicle data acquisition system with React, Firebase, Python, and Arduino
- Manufactured a gas vehicle with efficiency of 700+ mpg and electric vehicle with 130+ mi/kwh
- Conducted mathematical analysis on burn algorithms w/ real time data acquisition system
- Manufactured structural components out of carbon fiber, plastics, and aluminum

### 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

### Golden State Racing | Composites and Aerodynamics Lead 2018 – 2019

- Designed road capable solar car from concept to manufacturing using NX modeling
- Submitted in Bridgestone 2019 World Solar Challenge, a 3000 km race in Australia
- Simulated composite body designs with Star CCM to optimize aerodynamics
- Ran FEA on composite body using MSC Apex to determine chassis design

## Skills:

SolidWorks, NX, AutoCad
React, Redux, JavaScript, Java, C++
Finite Element Analysis on Composites
Mathematical modeling and simulations
MCUs and Embedded Systems
Python, MATLAB – Data Analysis
Star CCM for Computational Fluid Dynamics
Metal Machining and Woodworking

## Awards and Honors:

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