

# Varun Kulkarni

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#### Education

GEORGIA INSTITUTE OF TECHNOLOGY, College of Computing Candidate for Bachelor of Science in Computer Science GPA: 3.23, CS GPA: 3.60 Atlanta, GA
Expected May 2022
Dean's List Spring 2020

# **Experience**

## **EcoCAR Mobility Challenge**

Atlanta, GA

Connected & Automated Vehicles Subteam Member

August 2019 - Present

- Collaborating with engineering and computer science students to transforming a standard Chevrolet Blazer into a hybrid-electric and semi-autonomous vehicle
- Working with Matlab and Simulink to simulate vehicle's internal and external sensors, radars, and cameras.
- Applying sensor fusion algorithms to reliably detect vehicles in the blind spot of the vehicle and efficiently alert the driver
- Utilizing the New Eagle Raptor controller setup to test CAN channels and signals for sensors on the vehicle

Openet Telecom Reston, VA

Software Engineering Intern

*May 2019 – August 2019* 

COMP – Centralized Operations Management Platform (COMP), Openet's premier data analytics & visualization platform

- Successfully completed end-to-end installation, configuration, product customization and testing of COMP
- Created live dashboards with Elasticsearch, Kibana, & Grafana to monitor KPIs, alarms, and event records from Openet Policy & Rules Function (PCRF) and Online Charging System (OCS)
  - Ensured 5 9s availability of the system
- Demonstrated capabilities of COMP (dashboards, querying of clusters) and presented future capabilities (machine learning, anomaly detection) of the solution to an Openet client

PCRF – Policy & Charging Rules Function, used in operator's network to enforce policy control & flow-based charging

- Installed PCRF solution on an Openet satellite customer's deployment
- Successfully conducted multi-day performance testing at up to 2000 TPS on production cluster by pushing SOAP and Diameter traffic through a JMeter testing suite
- Generated reports including in-memory database performance, solution latency and traffic statistics, and alarm counts that were verified by Openet development team and visualized on COMP deployment

#### Student Center Programs Council, Georgia Tech

Ashburn, VA

Back-end Developer

March 2019 - May 2019

- Helped implement part of the Program Council's NodeJS backend system for information, scheduling, and sign-in on-campus events sponsored by the university
- Used NodeJS with Express and MongoDB server models to configure routes, host data, and simulate API requests to the data related to users and events
- Assisted in integrating the new backend with a front-end using ReactJS

### Skills

**Technical Skills** – Java, Amazon Web Services (AWS), GitHub, JavaScript, Python, Linux, Elasticsearch and ELK Stack, Grafana, HTML, CSS, JMeter, Inkscape, Machine Learning, Artificial Intelligence **Certifications** – Certified AWS Solutions Architect (Expires August 2022) **Interests** – Singing, Hip Hop/Urban Dance, Weightlifting, Cycling, Tennis