Aamir Rasheed

Website: aamir.me

Education

M. S. Computer Science (Artificial Intelligence) | **Stanford University** *Dec 2020*

B. S. Computer Engineering | Regents' Scholar | **University of California, San Diego** *June 2018*

Employment

Gatik AI, *Software Intern, Autonomous Vehicles* *June 2019 – Sept 2019*

- Developed 2D drag-and-drop scenario creator interface to generate simulated driving scenarios
- Created extendable unit testing framework to validate stack changes by simulating driving scenarios
- Replicated and fixed various issues in the planning stack of the autonomous vehicle
- Automated large parts of map annotation process, reducing annotation time by half

NVIDIA, *Software Intern, Autonomous Vehicles* *June 2018 – Sept 2018*

- Developed 3D annotation tool for LIDAR scans, utilizing principles of user-centered design
- Enabled NVIDIA Driveworks to identify objects in LIDAR scans
- Implemented in C++ with the DriveWorks SDK and OpenGL framework

Uber, *Software Engineering Intern, Maps & Navigation* *June 2017 – Sept 2017*

- Developed new active real-time navigation to route Uber cars during peak traffic
- Improved system response time to ride request by 3x
- Implemented and released in Java with the Redis framework

Workday, *Mobile Engineering Intern, Image Processing* *Jun 2016 – Aug 2016*

- Built brand new iOS feature to automatically process expense receipt images using OCR
- Reduced user time spent on expenses module by 65%
- Submitted Patent Disclosure - "Iterative Diagonal Roofing"
  - Process image geometric properties in linear time.
- Written using Python, Swift, Java, C++, and the OpenCV and Tesseract frameworks

Projects & Research

Cortex Companion App Admin Dashboard, *Developer* *June 2019 – August 2019*

- Built analytics dashboard that tracks user engagement, conversion rates, and churn rates
- Built secure database management interface to add lessons (with form validation) & modify entries
- Built using ReactJS + various libraries (frontend) and Firebase (backend)

Tank Robot with Arm, *Developer* *June 2019 – August 2019*

- Built 12in x 6in tank with uArm Swift Pro robot arm, controlled via Raspberry Pi and PS3 Controller
- Built using Python, Raspberry Pi, Robot Operating System (ROS), and various vehicle hardware

Self-Driving Autonomous 1:10 RC Car, *Software Developer* *Sept 2017 – Dec 2017*

- Modified an RC car to navigate track autonomously with camera
- Trained convolutional neural network on various filtered image inputs to optimize turning accuracy
- Built using Python, Raspberry Pi, Tensorflow, OpenCV, and various vehicle hardware

Skills – Professional Competency

Python, Javascript, , ReactJS, Java, C, C++, Pytorch, Raspberry Pi, OpenCV, Swift, Arduino