

# Aamir Rasheed

Website: [aamir.me](http://aamir.me)

## Education

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- M. S.** Computer Science (Artificial Intelligence) | **Stanford University** Dec 2020  
**B. S.** Computer Engineering | Regents' Scholar | **University of California, San Diego** June 2018

## Employment

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**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

## Projects

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**Ergonomics Automator** March 2020 – June 2020

- Built ML-powered posture recognizer that detects poor posture at desk using pose detection
- Achieves 85% classification accuracy, best of 4 different methods tried including CNNs
- Built using Tensorflow, OpenPose, Python

**Tank Robot with Arm** 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** 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

**Cortex Companion App Admin Dashboard** 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)

**SDHacks** June 2014 – October 2015

- Led 30 person team to organize inaugural hackathon for UC San Diego – has run every year since
- Raised over \$200,000 in sponsorship from Qualcomm, IBM, Facebook with 500+ in attendance

## Skills

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