

# GRANT MOE

## SOFTWARE ENGINEER

### CONTACT

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Los Angeles, CA

[Website](#)

[LinkedIn](#)

[GitHub](#)

### EDUCATION

BA - Psychology w/  
Information & Computer  
Science minor  
University of California, Irvine  
June 2013  
Irvine, CA

Data Science Immersive  
Certificate of Completion  
General Assembly  
August 2021 - November 2021  
Remote

### SKILLS

Python  
Arduino/C++  
TensorFlow  
Keras  
Numpy  
Pandas  
OpenCV  
MySQL  
Data Cleaning  
Data Visualization  
Machine Learning  
Neural Networks  
Artificial Intelligence  
Linux, Git

### WORK EXPERIENCE

#### Electronics Fabricator and Creative Technologist

Freelance

October 2018 - current / Los Angeles, CA

- Manufactured OpenPath (acquired by Motorola) keyless entry demo units
- Worked as a contractor for VTProDesign on projects including Britney Spears - The Zone 30,000 sq ft installation in LA (featured in The New York Times, CNN, and Forbes)

#### Software Developer - Volunteer

Cognitive Anteater Robotics Laboratory (CARL), UC Irvine

Summer 2013 / Irvine, CA

- Built robotic control and telemetry applications for an Android robotic platform using Robot Operating System (ROS)
- Implemented RatSLAM, a biologically-inspired simultaneous localization and mapping algorithm based on rodent hippocampi

### PROJECTS

#### Neural-Net Autonomous Racer

- Built and tuned neural network machine learning models to train autonomous racecars to quickly navigate racetracks in OpenAI physics simulator
- Used Jupyter, Python, Numpy, Pandas, PyPlot, Seaborn, Tensorflow/Keras

#### OpenAI/Donkey Gym Client

- Created custom Python client to record telemetry and transmit commands via the Donkey Car simulator API
- Supports standard CSV, Donkey Car tub, and OpenVSLAM ASL data formats

#### DIY Robocar

- Developed manual and autonomous control software for NVIDIA Jetson Nano Linux single-board computer communicating with PJRC Teensy 4.0 microcontroller over serial connection
- Used Python, Arduino/C++, Bluetooth LE

### LEADERSHIP

#### Board Member

CRASH Space hackerspace

August 2020 - Current / Los Angeles, CA

#### Team Founder

UC Irvine RoboCup Rescue Robotics Team (RoboEaters)

2012 - 2013 / Irvine, CA