# Grant Moe

## Data Scientist and Roboticist

SUMMARY

Grant wants to be a mad scientist and/or autonomous vehicle wrangler. He is excited to leverage artificial intelligence to solve real-world problems. He has most recently attended a data science immersive boot camp to build foundational machine learning and neural network modeling skills. His non-work interests range wildly but mostly involve tinkering and working with his hands, whether it's using CAD to design tools for use around the house or building custom guitar speaker cabinets.

: **Los Angeles, California, United States**

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: **https://grantmoe.com**

: **GrantMoe** (https://github.com/GrantMoe/)

: **Grant Moe** (https://www.linkedin.com/in/grantmoe/)

: **grantemoe** (https://www.instagram.com/grantemoe/)

: **GrantEMoe** (https://twitter.com/GrantEMoe)

## Experience

Oct 2018 – *present*

### Electronics Fabricator and Creative Technologist at Freelance

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

Aug 2015 – Oct 2018

### Bookseller/Shipper/Receiver at Barnes & Noble

- Tracked inventory and managed stock
- Processed and documented all incoming and outgoing shipments
- Boosted product sorting efficiency by optimizing stockroom layout

## Languages

**English** : ★★★

**Spanish** : ★☆☆

**Norwegian** : ★☆☆

## Skills

**Python** : ★★☆

**C++** : ★★☆

**Machine Learning** : ★★☆

## Interests

**Making** :

Arduino | DIY Robocars | Guitar Amps

Jun 2013 – Sep 2013

### Volunteer Lab Assistant at Cognitive Anteater Robotics (https://www.socsci.uci.edu/~jkrichma/CARL/)

SUMMARY

"In the Cognitive Anteater Robotics Laboratory (CARL) at the University of California, Irvine, we are designing robotic systems whose behaviors are guided by large-scale simulations of the mammalian brain. Because these simulated nervous systems are embodied on a robot, they provide a powerful tool for studying brain function."

- Developed control and telemetry software for an autonomous Android robot
- Created a custom C++ Robot Operating System (ROS) module linking Galaxy S3 robot brain to Ubuntu laptop over peer-to-peer UDP socket
- Used ROS to build a graphical user interface and to implement RatSLAM, a biologically-inspired simultaneous localization and mapping algorithm based on rodent hippocampi.

## Volunteer

Aug 2020 – *present*

### Board Member at CRASH Space (https://blog.crashspace.org/)

SUMMARY

CRASH Space non-profit organization located in Los Angeles and run by volunteers. It is a part of the growing global hackerspace movement. We are a collection of hackers, programmers, builders, makers, and artists. We promote science, technology, engineering, arts, and mathematics (STEAM) by teaching classes, participating in events, providing on-line resources, and by running a shared workshop. Our members use the space to work on their projects, share ideas, and help each other create whatever they envision.

- Hosts monthly robotics and neuroscience interest groups

Mar 2021 – *present*

### Organizer at DIY Robocars Los Angeles (https://www.meetup.com/DIY-Robocars-Los-Angeles/)

SUMMARY

This is the Los Angeles event companion to the DIY Robocars site, which is for people who want to make and race DIY autonomous cars of any size, from tiny 16th scale to full-size (we don't include go-karts, yet). Meetups are opportunities to hack, compete, and show and tell. Meetups will typically be in a space where 1/10 cars can be run indoors and/or have nearby parking lots where 1/10th scale self-driving cars (and go-karts in the future) can be raced or just tested in driverless mode.

- Coordinates and plans meetups for group of 88 DIY autonomous racing enthusiasts

## Education

Aug 2021 – Dec 2021

### General Assembly Remote Data Science Immersive

- 12-week full-time immersive educational program strengthening Data Science skills including: Python, SQL, data cleaning, data visualization, regression models, classification models, web-scraping, APIs, NLP, advanced supervised learning, unsupervised learning, time series analysis, and statistics.

Jun 2013

### BA in Psychology with minor in Information and Computer Science from University of California, Irvine

- Founded UC Irvine RoboCup Rescue Robotics Team, successfully gaining admission to the RoboCup 2013 World Championship in Eindhoven, the Netherlands. Organized and led undergraduate research teams for both the Undergraduate Research Opportunities Program and the UCI Multidisciplinary Design Program. Research fellow for Summer Undergraduate Research Program project.

Sep 2012

### IEEE-RAS Safety Security and Rescue Robotics Summer School - Alanya, Turkey

- Participated in a group project to leverage supervised machine learning to the computer vision task of classifying terrain in urban disaster environments. Worked alongside professionals and academics in the fields of robotics, computer science, and search and rescue. Hosted by the Robotics and Automation Society professional society of the Institute of Electrical and Electronics Engineers.

## Awards

2012 - 2013

### Research Fellowship from UC Irvine Undergraduate Research Opportunities Program

SUMMARY

Biologically-Inspired Robot Swarms for Search and Rescue Missions

2012

### Summer Research Fellowship from UC Irvine Undergraduate Research Opportunities Program

SUMMARY

Survey of Robot Designs and Control for RoboCup Rescue Robot League