

Jeffrey Ng

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510-512-5621

SKILLS

Languages: Python | C | Java | Go | Dart | SQL

Technologies: Version Control | Distributed Systems | Containerization | PyTorch | Linux | ROS | Django | Flask | SQL

EXPERIENCE

Machine Learning & Data Junior Engineer

January 2022 - Present

Massachusetts Institute of Technology

Cambridge, MA

- Maintaining data pipeline and processing terabytes worth of naturalistic driving data supporting the AVT consortium, which comprises of automakers, insurance companies, and tier 1 suppliers
- Gathered requirements, designed, and implemented road trajectory and curvature algorithms with PyTorch
- Researched and led new approaches for in-vehicle pose estimation
- Programmed participant identification tool with Python to efficiently filter and validate video stream
- Curates and queries new datasets for research on human interactions with modern vehicles

Machine Learning Intern

June 2020 - September 2020

Lawrence Livermore National Lab

Livermore, CA

- Developing tools for intelligent autonomous sensor networks that will enable information extraction from uncertain environments and potential adversaries without centralized command-and-control agent
- Integrated simulation software after evaluating the capabilities of several solutions
- Work included computer vision, pathing, and swarming behavior

Lab Research Intern

October 2018 - May 2019

University of California, Merced

Merced, CA

- Collaborated with Ph.D. students on embedding awareness into drones with deep learning algorithms
- Built pipeline tools to process over 10,000 flight logs and simulate flights with ROS, Gazebo, & PX4
- Tuned neural network performance under different hyperparameters; presented paper & work at ICUAS

EDUCATION

University of California, Irvine

Graduated: June 2021

Bachelor of Science in Computer Science

Irvine, CA

- **Relevant Coursework:** Object Oriented Programming, Robotics, Machine Learning, Deep Learning, Algorithmic Design, Applications of Probabilities, Quantum Computation, & Software Engineering

PROJECTS

Cofounder

2022 - 2023

QuickSplitz

San Francisco, CA

- Grew a team of five people to create a product that combined the most useful features from Yelp and Venmo
- Worked on everything starting from idealization, market analysis, UI design, to software development

Software Engineer

February 2020

Autonomous Charging Bot

Irvine, CA

- Won Best Infrastructure Hack at HackUCI 2020
- Designed a robot that navigates to a vehicle using ROS and Gazebo. With reinforcement learning, trained a modular robotic arm to reach a point in space being conceptualize as a charging tether.