

ADAM YOUNG

Chicago, IL · (760) 846-6039 · youngcadam@g.ucla.edu · [linkedin.com/in/youngcadam](https://www.linkedin.com/in/youngcadam)

Objective

A highly resourceful individual possessing considerable research experience applying machine learning and deep learning methods to solve a variety of complex problems. Capable of developing efficient methods of collecting and processing large datasets, as well as building models in Python. Advanced programming proficiency.

Education

University of California, Los Angeles

September 2020

B.S. Mathematics of Computation

- GPA: 3.4
- Honors: Deans List (Winter 18)
- Relevant Coursework:
 - Intro to Computer Organization
 - Algorithms and Complexity
 - Operating System Principles

Linear Models
Machine Learning
Mathematical Statistics

Technical Skills

Machine Learning Models

regression, decision tree, SVM, k-means, PCA, CNN, DQN, LSTM

Programming Languages

Python, C, C++, MATLAB, R, JavaScript, Bash, SQL

Frameworks and Tools

pytorch, scikit-learn, gym, Docker, CUDA, cuDNN, OpenCV, Linux

Relevant Experience

Center for Vision, Cognition, Learning, and Autonomy, UCLA

July 2019 - Present

Research Assistant

- Mentored by PhD candidate, Xu Xie, reviewed literature on trajectory prediction in deep reinforcement learning
- Reviewed robotics literature from ICRA and IROS conferences
- Outlined paper replacing existing LSTM methods with attention mechanism (transformer)

WiZR

Summer 2018

Software Engineering Intern

- Implemented object detection models (YOLOv3) for automated video surveillance
- Used nvidia-docker to build both training and production containers with isolated CUDA dependencies
- Proposed project used in production for real-time threat detection using violent pose estimation and classification

UCLA Physics

December 2018 – August 2019

Research Assistant

- Worked 1-on-1 with PI investigating the behavior of electrons on Graphene lattice
- Applied bilateral filters to transmission electron microscope samples improving visualization of electron flow

Projects

Center for Vision, Cognition, Learning, and Autonomy, UCLA

November 2019

Research Project

- Implemented and fine-tuning state-of-the-art CNN based deep reinforcement learning models in pytorch
- Built efficient data pipeline to preprocess input image and video data
- Trained agents in OpenAI gym environments solving many tasks; accelerated network training using GPU

Department of Computer Science, UCLA

July 2019

Senior Design Project, Systems Engineer

- Designed, built, and debugged an embedded application to interact with central control server
- Implemented secure channel for encrypted communication featuring the aid of server-side logs
- Enabled IOT device to communicate temperature data with University server in real time