# Daniel Zeng

danielzeng@berkeley.edu linkedin.com/in/daniel-zeng (323) 609-5014 U.S. Citizen github.com/daniel-zeng danielzeng.com

#### University of California, Berkeley

Computer Science, Bachelor's Degree

May 2021 GPA 3.95

#### **Relevant Coursework**

CS189 - Machine Learning, CS170 - Algorithms,

CS188 - Artificial Intelligence

CS61B - Data Structures, CS186 - Databases

CS61C - Machine Structures, CS161 - Security

CS70 - Discrete Math and Probability Theory

#### Skills

**Languages:** Python, Java, Golang, Bash, Javascript C/C++, Assembly (RISC-V)

**Platforms/Tools:** TensorFlow, NumPy, PyTorch, Git, AWS, Kubernetes, Terraform,

SQL, gRPC, Jupyter Notebooks

## **Experience**

## Stripe | Software Engineer Intern, Data Infrastructure

May 2020 - Aug 2020

- Implemented, designed Hadoop command proxy service with Go, gRPC on AWS, Kubernetes
- Deployed service to production which proxied 300+ commands so far (reliable, scalable)
- Built observability dashboard for service via SignalFX and alerting via Terraform detectors

## Microsoft | Software Engineer Intern, Azure Production Infrastructure

May 2019 - Aug 2019

- Designed, developed analytics tool to automate queries for optimizing customer experience
- Built productivity tooling to empower visualization and observability in Azure infra systems

AutoLab | Research Assistant, Berkeley Artificial Intelligence Research Lab Feb 2019 - Feb 2020 Worked on machine learning research with postdoc Ajay Tanwani in Ken Goldberg's Automation Lab

- Researched unsupervised domain adaptation using adversarial representation learning
- Implemented and benchmarked adaptation algorithms, network architectures, metric learning
- Optimized adaption by aligning marginal and conditional distributions in latent feature space

## Cal Launchpad | Project Leader/Machine Learning Developer, UC Berkeley Sept 2017 - May 2019

- Lead team of 8 developers to implement GAN models for food image generation
- Implemented convolutional neural networks to reconstruct 3D facial volume from 2D image

#### NASA | Software Engineer/Research Intern, Ames Research Center

June 2018 - Aug 2018

- Developed an emulator for cyber security attacks on Air Traffic Management (ATM) system
- Built and tested functionality to generate and visualize a wide range of attack scenarios
- Implemented methods to model aircraft trajectory from specified origin to destination
- Created internal tooling to configure and interface ATM framework components with emulator

Upsilon Pi Epsilon, Nu Chapter | Vice President, UC Berkeley Dal Bó Lab | Research Assistant, UC Berkeley

Dec 2018 - Dec 2019 Sept 2017 - May 2018

## **Proiects**

#### Chess Game (github.com/daniel-zeng/ChessGame) (Python, tkinter)

- Implemented minimax tree search with Alpha-Beta pruning, and position evaluation functions
- Playable through graphical user interface and command-line with algebraic notation

Also on Github: Markov models for text generation, Variational autoencoder for MNIST generation