# Daniel Zeng

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**Stanford University** 

Expected June 2023

M.S. Computer Science

**University of California, Berkeley** 

May 2021

B.A. Computer Science

GPA 3.96

#### Relevant Coursework (Berkeley)

CS285 - Deep Reinforcement Learning (graduate)

CS189 - Machine Learning, CS182 - Neural Networks

CS188 - Artificial Intelligence, CS186 - Databases

CS170 - Algorithms, CS162 - Operating Systems

CS70 - Discrete Math/Probability, CS161 - Security

#### Skills

Languages: Python, Java, Golang, Bash, Javascript, C/C++, Assembly (RISC-V) Platforms/Tools: TensorFlow, NumPy,

PyTorch, Git, AWS, Kubernetes, Terraform,

SQL, gRPC, Make, Jupyter Notebooks

### **Experience**

## **SNAP Group | Graduate Researcher, Stanford University**

Sept 2021 - Present

Machine learning research, with postdoc Tailin Wu and advised by Prof. Jure Leskovec

- Researching neural-symbolic visual concept reasoning for few-shot learning on the ARC dataset
- Improving and tuning vision and RL pipeline for object-relations grounding within each task

### Yu Lab | Undergraduate Researcher, ICSI, UC Berkeley

Sept 2020 - Aug 2021

Machine learning computer vision research, with Tsung-Wei Ke and advised by Dr. Stella Yu

- Researched unsupervised image representation learning using pixel-level contrastive learning
- Implemented and benchmarked featurizations on semantic segmentation image embeddings
- Investigated spatial and structural relationships on classification and retrieval performance

#### Stripe | Software Engineer Intern, Data Platform Infrastructure

*May 2020 - Aug 2020* 

- Implemented, designed Hadoop command proxy service with Go, gRPC on AWS, Kubernetes
- Deployed service to production which proxied 1000+ commands so far (reliable, scalable)
- Built observability dashboard for service via SignalFX and alerting, detectors via Terraform

#### AutoLab | Undergrad Researcher, Berkeley Artificial Intelligence Research Feb 2019 - Feb 2020

Machine learning research, with postdoc Dr. Ajay Tanwani and advised by Prof. Ken Goldberg

- Researched semi-supervised 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

#### 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

#### 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
- Created internal tooling to configure and interface ATM framework components with emulator