Daniel Zeng

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Stanford University	M.S. Computer Science	GPA 3.94	*March 2023*
University of California, Berkeley	B.A. Computer Science	GPA 3.96	*May 2021*

Experience

Stripe — Software Engineer Intern, Data Infrastructure Team *May 2020 - Aug 2020*

- Implemented and designed Hadoop command proxy service on Kubernetes cluster and AWS
- Deployed scalable service to production which proxied thousands commands by internship end
- Built observability dashboard for service via SignalFx to monitor cluster health and send real-time alerts via Terraform

Google Research — Research Intern (Machine Learning), Health AI Team *June 2022 - Sept 2022*

- Created TF 2 training pipeline, overcame challenges integrating TF 1 teacher from CT pipeline
- Profiled training code with xprof to address bottlenecks with multi-host TPU training
- Researched distillation of DermAssist skin condition vision models to improve model efficiency
- Distillation outperforms by 10% accuracy on ResNet50x1 baseline of training directly on labels

Microsoft — Software Engineer Intern, Azure Production Infrastructure *May 2019 - Aug 2019*

- Developed tooling for analytics and database queries for incident management (IcM) evaluation
- Enhanced observability in Azure infra with visualization of IcM metrics and event summaries
- Implemented incident report generation based on customized database queries and events

Stanford AI Lab — Graduate Researcher, SNAP Group *Sept 2021 - Present*

Project with Tailin Wu and advised by Professor Jure Leskovec

- Led research direction, implementation for visual relations discovery w/ graph neural networks
- Designed model architecture to capture object-relation correspondence representations
- Method achieves 95+% in relation classification and generalizes to unseen graph structures

Project with Qian Huang et al. and advised by Professor Jure Leskovec

- Researched graph pretraining objectives to enable in-context learning on few-shot graph tasks
- Implemented batch construction of graph tasks and multi-task sampling in data pipeline
- Ideation, tuning, experiments on model architectures, pretraining objectives, hyperparameters

NASA — Software Engineer/Research Intern, Ames Research Center *June 2018 - Aug 2018*

- Developed simulation for cyber security attacks on Air Traffic Management (ATM) system
- Built and tested functionality to generate and visualize diverse attack scenarios
- Created internal tooling to configure and interface ATM framework components with simulator

UC Berkeley — Undergrad Researcher, ICSI Vision Group *Sept 2020 - Aug 2021*

- Researched unsupervised image representation learning using pixel-level contrastive learning

Skills

Languages: Python, Java, Bash, Golang, C/C++, Javascript, Matlab
Platforms/Tools: PyTorch, TensorFlow, NumPy, WandB, Git, AWS, Kubernetes, Terraform, SignalFX, gRPC, SQL, matplotlib, Jupyter Notebooks