Daniel Zeng

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| **Stanford University** | M.S. Computer Science | GPA 3.91 | *June 2023* |
| **University of California, Berkeley** | B.A. Computer Science | GPA 3.96 | *May 2021* |

Relevant Courses

CS224W - ML with Graphs, CS182 - Neural Networks
CS330 - Deep Multi-Task and Meta-Learning
CS285 - Deep Reinforcement Learning, CS188 - AI
EE126 - Probability/Random Processes, CS189 - ML
CS224N - NLP, CS162 - Operating Systems

Skills

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

Publications

Daniel Zeng, Tailin Wu, Jure Leskovec. *ViRel: Unsupervised Visual Relations Discovery with Graph-level Analogy.* ICML 2022 Beyond Bayes (Reasoning) Workshop. https://arxiv.org/abs/2207.00590.

Experience

Google | Research Intern, Health AI   *June 2022 - Sept 2022*
- Researched knowledge distillation of DermAssist model ensemble to achieve efficient models
- Implemented learning pipeline to match teacher and student probability predictions
- Experimented with training techniques to optimize distillation and baseline performance

SNAP Group | Graduate Researcher, Stanford University   *Sept 2021 - Present*
Machine learning research, with postdoc Tailin Wu and advised by Professor Jure Leskovec
- Researching neural-symbolic visual concept reasoning for few-shot learning on the ARC dataset
- Implementing unsupervised discovery of concept relations with graph neural networks
- Improving vision and learning pipeline for compositional object-relation correspondence

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 Professor 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*