Daniel Zeng

Stanford UniversityM.S. Computer ScienceGPA 3.91June 2023University of California, BerkeleyB.A. Computer ScienceGPA 3.96May 2021

linkedin.com/in/daniel-zeng

Relevant Courses

danielzeng@stanford.edu

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

github.com/daniel-zeng

- 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