Daniel Zeng

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University of California, Berkeley   *May 2021*
Computer Science, Bachelor's   GPA 3.945

Relevant Coursework (*****in progress)   **Skills**

CS285***** - Deep Reinforcement Learning (graduate)   **Languages:** Python, Java, Golang, Bash,
CS189 - Machine Learning**,** CS170 - Algorithms,   Javascript, C/C++**,** Assembly (RISC-V)
CS188 - Artificial Intelligence, CS186 - Databases   **Platforms/Tools:** TensorFlow, NumPy,
CS61B - Data Structures, CS162***** - Operating Systems   PyTorch, Git, AWS, Kubernetes, Terraform,
CS70 - Discrete Math/Probability**,** CS161 - Security   SQL, gRPC, Make, Jupyter Notebooks

Experience

Yu Lab | Undergraduate Researcher, ICSI, UC Berkeley   *Sept 2020 - Present*
Machine learning computer vision research, advised by Tsung-Wei Ke and Dr. Stella Yu
- Researching unsupervised image classification using pixel-level contrastive learning
- Implemented and benchmarked featurizations on semantic segmentation image embeddings
- Investigating 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, advised by postdoc Dr. Ajay Tanwani and Prof. Ken Goldberg in AutoLab
- 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
- Implemented methods to model aircraft trajectory from specified origin to destination
- Created internal tooling to configure and interface ATM framework components with emulator

Cal Launchpad | Project Leader/Machine Learning Developer, UC Berkeley   *Sept 2017 - May 2019*
- Led team of 8 developers to build generative adversarial networks for food image generation
- Developed educational slides and TensorFlow notebooks to teach machine learning

Dal Bó Lab | Undergrad Researcher, UC Berkeley Haas School of Business   *Sept 2017 - May 2018*
Bhatia Lab | Research Intern, Boston University   *July 2016 - Aug 2016*