ALEX ZHAO

(818) · 334 · 7096 ⋄ axyzhao@berkeley.edu ⋄ axyzhao.github.io

EDUCATION

University of California, Berkeley   *Expected May 2021*
B.S. Electrical Engineering & Computer Science/B.S. Business Administration ‖ GPA: 3.77/4.00
Management, Entrepreneurship, & Technology Program (M.E.T.)
Honors: Regent's & Chancellors' Scholar, Dean's List from 2018-19

EXPERIENCE

Statistical Artificial Intelligence Lab (SAIL)   August 2019 - present
Research Intern   *Berkeley, CA*

· Develop an environment for online, feedback-aware evaluation of new recommendation engines with Professor Michael Jordan and the SAIL group.
· Perform research on robust machine learning to identify fault-tolerant features resistant to malicious attackers.
· Experiment with domain transfer techniques through layerwise normalization in image classification with RISELab.

Zalando   June 2019 - August 2019
Research Engineering Intern   *Berlin, Germany*
Largest e-commerce company based in Europe, headquartered in Berlin

· Applied sequence transduction models to customize size and fit recommendations for customers, outperforming existing model on subset of products.
· Co-authored conference paper on attention-based recommendation algorithms; submitted to SIGIR 2020 for review.
· Wrote transformer model in PyTorch based on recent deep learning publications on encoder-decoder architectures and attention-based natural language processing (Vasiwani et al, 2017).
· Finetuned hyperparameters and parallelized algorithm to run across multiple GPUs.
· Conducted research on word embeddings and neural network architectures for weekly presentations to team leads.

National Geographic   September 2018 - December 2018
Data Science Intern   *Washington, D.C.*

· Analyzed 14 terabytes of session data on over a million National Geographic customers using Google BigQuery, Apache Spark, and Python libraries such as pandas and scikit-learn.
· Constructed and cross-validated random forests, feed-forward networks, and logistic regression to develop customer segmentation and increase customer retention rates.
· Built collaborative filtering model to recommend articles, outperforming the current baseline in production.

Pivotal Software   May 2018 - August 2018
Software Engineering Intern   *San Francisco, CA*

· Pair-programmed daily with small team for 12 weeks on Cloud Foundry, an open source multi-cloud platform.
· Updated and integrated command line interface written in Golang to support new Cloud Controller API.
· Released 3 new command line interface versions (v6.37.0-6.39.0) for general deployment with over a million downloads.
· Gained experience in distributed architecture, test-driven development, and continuous deployment to AWS and GCP.
· Developed continuous integration pipelines to enable agile rapid deployment at scale for component teams.

CAMPUS ACTIVITIES

Berkeley Consulting   September 2017 - present
Internal Vice President   *Berkeley, CA*
Student-run consulting firm working with Fortune 500 companies, startups, and non-profits

· Designed and built public-facing website for national non-profit lobbying for CO2 removal.
· Created data visualizations for client's presentation to Senate Environment & Public Works Committee in April 2018.
· Provided recommendations to HSBC's Head of International Banking on customer acquisition and market entry.

SKILLS

Computer Languages	Python, Golang, Java, C/C++, SQL, Lisp
Interests	philosophy (ethics & language), hiking, Roman history, paddle-boarding, and teaching debate
Tools	git, PyTorch, test-driven development, tensorflow, Linux, AWS/GCP, Apache Spark, continuous integration/development, Kubernetes, Docker, MongoDB