

ALEX ZHAO

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Recent UC Berkeley computer science graduate experienced in data visualization and machine learning.

Currently studying global affairs, interested in software developer roles with social impact.

EDUCATION

Tsinghua University, Schwarzman College

Expected May 2022

Master of Global Affairs

An elite international scholarship designed to prepare global leaders. One of 154 scholars from over 3,600 applicants.

University of California, Berkeley

August 2017-May 2021

B.S. Electrical Engineering & Computer Science/B.S. Business Administration || GPA: 3.82/4.00

Management, Entrepreneurship, & Technology Program (M.E.T.)

Honors: Regent's & Chancellors' Scholar, four-time Dean's List, Accel Scholars 2020-21, EECS Honors Program

Berkeley Artificial Intelligence Research (BAIR)

August 2019 - present

Undergraduate researcher advised by **Michael I. Jordan**, focusing on recommender systems and computer vision.

- Develop simulation framework for online, feedback-aware evaluation of recommender systems.
- Evaluate recommender systems based on rating accuracy, fairness, and performance on sparse data in the context of dynamic user behavior.
- Co-authored three papers on recommender systems in different workshops (see Publications).
- First author of a paper on AugPrune, a novel pruning algorithm for finding compact, robust networks.

PROFESSIONAL EXPERIENCE

Coral Genomics

June 2020 - August 2020

Machine Learning Intern

San Francisco, CA

YCombinator-funded startup applying artificial intelligence to personalize medicine

- Collaborate with two other engineers to create computational pipeline for product launch.
- Develop novel autoencoder model for genotype imputation on 1000 Genomes data and patient samples.
- Devise unsupervised clustering methods for high-dimensional clinical genotype data with missing values.

Zalando

June 2019 - August 2019

Machine Learning Intern

Berlin, Germany

Largest e-commerce company based in Europe, headquartered in Berlin

- Applied the Transformer model in Pytorch to customize size & fit recommendations for customers, outperforming existing models across all accuracy metrics.
- Co-authored paper on recommendation algorithms (accepted at Workshop on Recommender Systems in Fashion 2020).

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 & Python to improve digital content.
- Applied natural language processing models to web-scraped articles to identify trends in successful content & devise guidelines on tone & media integration for staff writers.

Pivotal Software

May 2018 - August 2018

Software Engineering Intern

San Francisco, CA

- Updated & integrated command line interface written in Golang to support new Cloud Controller API.
- Pair-programmed daily with small team for 12 weeks on Cloud Foundry, an open source multi-cloud platform.
- Gained experience in distributed architecture, test-driven development, & continuous deployment to AWS & GCP.

EXTRACURRICULARS

POLITICO

June 2021 - August 2021

Data Science Intern

Washington, D.C.

- Published stories on federal politics featuring interactive graphics on a small team of data journalists.
- Analyzed large datasets with Python and coded data visualizations for articles using React and D3.js.

The Daily Californian

February 2020 - June 2021

Projects Editor

Berkeley, CA

- Report on challenges in higher education through data-driven journalism and lead team of ten developers.
- Awarded Best Multimedia Package (1st) and Best Interactive Graphic (2nd place) by California College Media Association.

REFEREED PUBLICATIONS & PRESENTATIONS

A. Zhao, K. Kumaravel, E. Massaro, M. Gonzalez, "A Network-based Group Testing Strategy for Colleges." Paper accepted with revisions at Applied Network Science, September 2021.

A. Zhao, Y. Yang, X. Yue, Z. Liu, E. Ye, Y. Zhou, V. Shirsat, M. Mahoney, J. Gonzalez, K. Ramchandran, K. Keutzer. "AugPrune: Robust Network Pruning via Augmented Data." Under review at ICLR, 2021.

K. Hajjar, J. Lasserre, **A. Zhao**, R. Shirvany, "Attention Gets You the Right Size & Fit in Fashion." Paper presented at Workshop on Recommender Systems in Fashion at Recsys, 2020.

K. Krauth, **A.Zhao***, S. Dean*, W. Guo*, M. Curmei*, B. Recht, M. Jordan, "Do Offline Metrics Predict Online Performance in Recommender Systems?" Paper presented at NeurIPS Workshop on Consequential Decision Making in Dynamic Environments, 2020. Position paper at SimuRec Working Group, RecSys 2021.