

Peter Zhang

🏠 2243 Dwight Way, Berkeley, CA 94704

☎ (240) 994-2204 ✉ petez@berkeley.edu 🌐 petezh 🖥 www.peterzha.ng

Education

University of California, Berkeley

Berkeley, CA

Computer Science, Economics, & ORMS B.A., Data Science Minor; 3.97 GPA

2020–2024

Coursework: DS&A, ML/AI/DL, Theory of Computing, Data Science & Inference, Computer Architecture, Probability/Stochastics, Macro/Micro/Econometrics, Behavioral Economics/Finance, Analysis+LinAlg

Activities & Societies: Voyager Consulting, Traders at Berkeley, ML@B, CSM, UPE

Research Experience

Berkeley Artificial Intelligence Lab

Berkeley, CA

Researcher under Jacob Steinhardt

Jan 2022–Present

- Fine-tuned large language models for social science applications, e.g. measuring political slant.
- Built OpenD5, a meta-dataset of 700 interdisciplinary tasks, submitted 2nd-author to ICML '23.
- Improved and assessed hypothesis discovery algorithm, achieving 5-100x speedups and improving insight.
- Experimenting with novel applications of language models for collaborative forecasting and decision-making.

Moore Accuracy Lab

Berkeley, CA

Research Assistant under Prof. Don Moore

Sept 2022–Present

- Create and analyze surveys examining the effects of phrasing and incentives on confidence in judgement.
- Lead research project comparing the calibration of humans and language models on multiple-choice tasks.

Malmendier Group

Berkeley, CA

Research Assistant under Prof. Ulrike Malmendier

Jan 2022–Dec 2022

- Scraped and analyzed dozens of datasets related to macroeconomics, CEO pay, business activity.
- Reviewed literature, drafted/proposed sections, and copy edited for book proposal about experience effects.
- Applied language models to automate and improve annotations of business events.

Center for Effective Global Action

Berkeley, CA

Research Apprentice

Jan 2021–May 2021

- Developed an R Shiny/markdown showcase and drafted a set of guidelines for improving policy analysis.
- Assessed and identified weaknesses in 5 policy-relevant papers using R, Stata, Python, and L^AT_EX.

National Cancer Institute

Rockville, MD

Research Assistant

Jul 2019–Oct 2021

- Reformatted gene expression results from cancer drug trials for efficient, on-demand user query.
- Developed R Shiny dashboard with one-click, Electron interface, published as 1st-author in Bioinformatics.

National Institute of Standards and Technology

Gaithersburg, MD

Economics Research Intern

May 2020–Sep 2020

- Annotated 57 papers on resilience planning to assess the role of co-benefits in recent benefit-cost analysis.
- Published user manual & case study for Edge\$, decision-making software to help community leaders.

National Institute of Standards and Technology

Gaithersburg, MD

NLP Research Intern

Jun 2019–Aug 2019

- Designed rule-based Python scripts to preprocess corpora and construct subject-predicate-object tuples.
- Improved LDA topic modeling with root-and-rule preprocessing across multiple corpora for search tools.

Professional Experience

Susquehanna International Group

Bala Cynwyd, PA

Quantitative Trading Intern

Jun 2022–Aug 2022

- Designed and built NLP model to predict trading volume that was immediately used by traders in production.
- Completed rigorous finance/options curriculum; competed in mock trading and various strategic games.

Bill and Melinda Gates Foundation

Seattle, WA

Contract Consultant

Sep 2021–May 2022

- Synthesized 200+ publications and interviewed 11 topic experts on medical product quality in Africa.
- Led team of 5 to present 180-page report to 30 stakeholders which informed foundation investments.

Intel Foundry Services

Santa Clara, CA

Contract Consultant

Jan 2022–May 2022

- Led team of 5 to benchmark competitors and scrape financial data from investor reports.
- Built dashboard to store data, forecast trends, and analyze competitor customers, which is still in use today.

Uber Eats

San Francisco, CA

Data Analyst

Sep 2021–Dec 2021

- Segmented 2M eaters via a random forests, PCA, and clustering approach on massive behavioral dataset.
- Modeled effect of discounts on Eats pass conversion and provided strategy recommendations for each cluster.

Amazon Web Services

Arlington, VA

Software Development Engineer Intern

Jun 2021–Aug 2021

- Designed and developed a scalable, serverless tool to notify customers of service issues with a flexible API.
- Rapidly tested and iterated in an agile workflow, using Java/Typescript and AWS services (CDK/SQS/Lambda).

Publications

- **Zhang, P.**, Palmisano, A., Kumar, R., Li, M.C., Doroshov, J.H. and Zhao, Y., 2022. TPWshiny: an interactive R/Shiny app to explore cell line transcriptional responses to anti-cancer drugs. *Bioinformatics*, 38(2), pp.570-572.
- Helgeson, J.F. and **Zhang, P.**, 2020. Economic Decision Guide Software (EDGe\$) Online Tutorial: Wildland-Urban Interface (WUI) Case Study. US Department of Commerce, National Institute of Standards and Technology.

Teaching Experience

Berkeley CS 61A

Berkeley, CA

Tutor/Content Mentor

Sep 2020–May 2022

- Delivered 100+ hours of live instruction via section & lecture over 5 semesters to 30+ students.
- Produced 25+ worksheets for 100 mentors over 3 semesters and reduced overhead by several hours.

The Bronx High School of Science

Bronx, NY

Assistant Debate Coach

Aug 2020–May 2021

- Led 2 practices/week for 30+ debaters and drilled 1-on-1, qualifying to national championship.
- Judged and coached at 18 national, multi-day tournaments, providing detailed feedback to 100 competitors.

Foundation for Advanced Education in the Sciences

Bethesda, MD

Teaching Assistant

Jan 2021, Mar 2021

- Taught two sessions of a 3-week introductory Python course with 15 graduate students at the NIH.
- Facilitated Slack discussions, held 10+ 1-on-1 office hours, and graded student assignments.

Skills

Languages: Python, R, Java/Kotlin, JS/React, L^AT_EX, SQL, functional programming, HTML5/CSS

Libraries: Numpy/Pandas, PyTorch/Tensorflow, Huggingface, Dash/Shiny, Selenium/BeautifulSoup

Tools: Git/Terminal, Slurm, Azure/AWS, WordPress, Electron

Awards

Citadel World Finals Data Open, 4th Place

Dec 2022

Citadel West Coast Data Open, 3rd Place

Apr 2022

UC Berkeley Leadership Award; 3x Recipient

Jul 2020, Aug 2021, Aug 2022

DSS x NIB Datathon for Social Good, 1st Place

Nov 2021

USA Computing Olympiad, Platinum Division

May 2020