Jacob Z. Eliason

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Summary

Data scientist with 4+ years of experience driving business impact through experimentation, causal inference, and production machine learning systems. Proven track record of partnering with cross-functional teams to build and scale data solutions, with particular expertise in business process optimization and survey research. Strong foundation in statistical methodology complemented by hands-on experience with modern cloud and analytics infrastructure.

Education

The London School of Economics and Political Science

M Sc Statistics

London, United Kingdom

Sep 2022 - Aug 2023

• Dissertation: Estimating the Causal Effect of German Nuclear Plant Closures on Electricity Generation Using Gaussian Process Regression

Brigham Young University

B.S. Statistics

· Minors: Mathematics, Political Science

Provo, UT, United States Jan 2016 - Dec 2019

Experience

Thumbtack

Senior Data Scientist

Remote, USA Mar 2025 - Present

· Partner with refund operations and commercial strategy teams to optimize business processes through causal inference, experiment design, and statistical support

AvalonBay Communities

Senior Data Scientist

Arlington, VA, USA Apr 2024 - Feb 2025

- · Designed and implemented upgrades to ensemble forecasting system (built using Python and AWS Lambda), reducing prospect forecast error by >50% and earning company recognition for impact
- · Partnered with revenue management and marketing analytics teams, providing strategic support for causal inference, A/B testing, and survey research projects

Guidehouse

Arlington, VA, USA

Data Scientist - Senior Consultant

Aug 2023 - Apr 2024

- · Deployed, and maintained the backend of a reporting tool used by several hundred employees, following Agile development practices, for a US Department of State client in Python using Azure Cloud
- · Developed evaluation framework for LLM accuracy improvement using LangChain and chain-of-verification prompting

United States Census Bureau

Mathematical Statistician

Washington, DC, USA

Sep 2020 - Feb 2022

· Wrote and edited programs in SAS using SQL for production work on the Survey of Income and Program Participation; responsibilities included sampling, weighting, and variance estimation using SAS, SQL, and R

Y2 Analytics

Data Analyst

Salt Lake City, UT, USA

Jan 2020 - Aug 2020

- · Implemented end-to-end survey research projects for diverse client base, translating stakeholder needs into research design and actionable recommendations; programmed questionnaires in Qualtrics, cleaned survey data, produced graphics, analyzed relationships using conjoint analysis and other statistical modeling frameworks, and wrote text for final deliverables
- Contributions to in-house R package are still used years later by 10+ analysts

Skills

Programming & Development Languages: Python, R, SQL, Unix Shell MLOps: deployment, evaluation, monitoring Cloud: Azure, GCP, AWS

Data Management & Engineering Warehouses: Snowflake, BigQuery, Databricks Orchestration: Dagster, Airflow

Al & Deep Learning LLM Tooling: Embeddings, LangChain Frameworks: TensorFlow, PyTorch

Statistical Analysis & Machine Learning Theory: Probability, hypothesis testing, Bayesian inference Application: A/B testing and experiment design, time series forecasts, boosting and bagging methods