Jacob Z. Eliason

contact@jacobeliason.com | cell available on request github.com/jcblsn I linkedin.com/in/jacobzeliason I jacobeliason.com Based in Washington, DC, USA

Summary

Data scientist with 4+ years of experience driving business impact through experimentation, causal inference, and production analytics. 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 ML infrastructure.

Education

The London School of Economics and Political Science

US Department of State client in Python using Azure Cloud

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

AvalonBay Communities

Senior Data Scientist

Arlington, VA, USA

- Apr 2024 Present · Partnered with revenue management and marketing analytics teams, providing strategic support for causal inference, A/B testing, and survey
- research projects · Designed and implemented upgrades to ensemble forecasting system using AWS Lambda and Python, reducing prospect forecast error by >50% and earning company recognition for impact
- Implementing production analytics infrastructure following MLOps best practices for scalable model evaluation and monitoring

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
- Developed evaluation framework for LLM accuracy improvement using LangChain and chain-of-verification prompting

DevTech Systems, Inc.

Arlington, VA, USA

Statistician

Feb 2022 - Aug 2022

· Implemented statistical disclosure limitation methods for agency data assets to satisfy k-anonymity and reduce risk

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 Salt Lake City, UT, USA

Data Analyst

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
- · Modeled voter education and turnout using hierarchical Bayesian model, informing sample selection for election polls
- · Contributions to in-house R package are still used years later by 10+ analysts

Skills

Programming & Development Languages: Python, R, SQL MLOps: version control, testing, deployment, monitoring Cloud: Azure, GCP, AWS Scripting: Unix Shell Visualization: Looker, Tableau Data Management & Engineering Warehouses: Snowflake, Databricks, BigQuery

Orchestration: Dagster, Airflow Al & Deep Learning LLM Tooling: LangChain, Vector Databases 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