JACOB Z. ELIASON

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US Govt Clearance Level: Secret

SUMMARY

I am a data scientist with experience in statistics, deep learning, and geospatial analysis. I recently graduated from the London School of Economics with a Master's in statistics, where I pursued additional training with modern data science tools to complement my background in traditional statistics. I am proficient in Python and R, having built scalable applications that process large datasets for statistical and geospatial analyses in both local and cloud-based environments. I have 3 years of full-time experience as a statistician and data analyst at the US Census Bureau and in the private sector.

EDUCATION

The London School of Economics and Political Science — London, United Kingdom
M.Sc. Statistics — Sep 2022 – Aug 2023

- Modules: Statistical Inference, Generalized Linear Modeling, Bayesian Machine Learning, Distributed Computing, Deep Learning, Dissertation

Brigham Young University — Provo, Utah, United States
B.S. Statistics — Jan 2016 – Dec 2019

- Minors: Mathematics, Political Science

EXPERIENCE

Guidehouse — Tysons Corner, VA, USA
Data Scientist – Senior Consultant, Advanced Analytics & Intelligent Automation (AAIA) — Aug 2023 – Present

- Support federal clients through expert programming and data analysis, applying modern software tools to derive actionable insights and inform evidence-based decision-making throughout the public sector

DevTech Systems, Inc. — Arlington, VA, USA
Statistician — Feb 2022 – Aug 2022

- Used R and `sdcMicro` to apply statistical disclosure limitation methods to agency data assets to satisfy `k`-anonymity and reduce risk
- Performed ad-hoc analytics and visualizations using R in support of policy decisions
- Staffed on DevTech's Analytics, Data, Visualization, and Information Services (ADVISE) project as member of the Privacy and Risk Analysis team within USAID Data Services in USAID's Bureau of Management, Office of the Chief Information Officer

United States Census Bureau — Suitland, MD, USA
Mathematical Statistician — 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
- Produced estimates and updated text for the Source and Accuracy statement for the calendar year 2020 data release
- Reviewed Census publications which reference SIPP data for adherence to quality standards

Y2 Analytics — Salt Lake City, UT, USA
Data Analyst — Jan 2020 – Aug 2020

- Contributed to elections modeling effort by modeling education and turnout using original hierarchical Bayesian models using R
- Conducted survey research projects for corporate and municipal government clients from start to finish: programmed questionnaires in Qualtrics, cleaned survey data using R and `y2clerk`, produced graphics using `ggplot2`, analyzed relationships using conjoint analysis and other statistical modeling tools, and wrote text for final deliverables

Data Analyst Intern — Washington, DC, USA
May 2019 – Aug 2019

- Wrote new functions and corresponding unit tests for in-house R package which are still used years later by 10+ analysts

SKILLS

- Programming & Scripting
  - Languages: Python, R, SQL, SAS
  - Version Control: Git, GitHub
  - Testing: `testthat`
  - Cloud Computing: Google Cloud Platform (Dataproc, Compute Engine, Cloud Storage)
- Data Management & Engineering
  - Big Data: Hadoop HDFS, PySpark
  - Pipeline Orchestration: Dagster, Airflow
  - Cleaning: `pandas`, `numpy`, `dplyr`, `tidyr`
  - Visualization: Tableau, R Shiny, `ggplot2`
- Statistical Analysis
  - Theory: Probability and inference, hypothesis testing, Bayesian methods, linear and non-linear modeling
  - Application: generalized linear models, time series forecasting, causal inference
- Artificial Intelligence & Machine Learning
  - Deep Learning
    - Frameworks: TensorFlow
    - Architectures: CNN, RNN, LSTM, Transformer
  - Machine Learning
    - Algorithms: Random forests, XGBoost, K-means
    - Evaluation: cross-validation, ROC, AUC
- Survey Research
  - Methodology: sampling, weighting, & variance estimation
  - Questionnaires: Qualtrics

Last updated 2023-09-07