SPENCER ELKINGTON

spelkington@gmail.com \diamond spelkington.github.io Salt Lake City, UT \diamond (775) 388-7033

EDUCATION

University of Utah May 2022

B.S. Quantitative Analysis of Markets & Organizations Minor Computer Science

Key Skills: Machine Learning, Economics, Strategic Consulting, Data Science, Algorithms, Statistics

Software: Jupyter, Databricks, Linux, AWS, Apache Spark, Snowflake, Pivotal, Tableau

Languages: Python (preferred), Lua, TypeScript, SQL, JavaScript, C#, C++

EXPERIENCE

Data Analyst | Data Science & Engineering Team, M Science

June 2021 - Present

- Developed and tested Databricks/PySpark data categorization pipelines and processes
- Designed **Tableau** dashboards for pipeline performance profiling & cost optimization insights
- Researched & implemented AWS/Spark optimizations to reduce job run costs by as much as 60%

Quantitative Research Intern, Wasatch Global Investors

Jan 2020 - May 2021

- Designed statistical allocation models to market and boost performance of investment portfolios
- Created experiments in **Python** to adapt network and spectrum analyses to financial forecasting
- Developed a Python/SQL data pipeline to ease and automate collection of financial data

DevOps Research Intern, Utah Center for High-Performance Computing

Mar 2019 - Feb 2020

- Built a Kubernetes/Docker platform to simplify deployment of science apps on cloud edge systems
- Researched the use of Foreman provisioning software to remotely structure new server clusters

PROJECTS

PointyPal: A Better Online Campus

2020 - 2021

- Built a class management application to provide students a better online experience during COVID-19
- Created and moderated a virtual campus for 600+ students to test application prior to opening source
- Conducted A/B testing to polish user experiences, resulting in peak growth rates of 100 users/mo

Beethoven, 2nd Place out of 30 teams

HackTheU 2019

- Designed a closed captioning and audio transcription service for deaf and hard-of-hearing students
- Built a peer-to-peer text & audio streaming TypeScript app using Node.js & React

Robloxaville 2017 - 2018

- Remastered a popular Lua game on the ROBLOX platform, supporting both PC & mobile gameplay
- Engineered project to patch security flaws and emphasize project maintainability and scalability

ORGANIZATIONS

VP of Education → **President**, Utah Chapter of Triangle Engineering

2019 - 2021

- Reconstituted chapter and passed down a 3-year plan to ensure future organizational stability
- Overhauled chapter functions to accommodate a fully-online environment during the 2020-2021 terms
- Redesigned governing organization to provide a better environment for chapter growth & self-governance

Genomomic Data Science Tutoring, University of Utah

2017

- Organized & lead a free **Python** tutoring group for a graduate genetic anthropology course
- Utilized stochastic learning algorithms to track genetic drift in time-series genetic data sets