# SPENCER ELKINGTON

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#### **EDUCATION**

## University of Utah

August 2022

B.S. Quantitative Analysis of Markets & Organizations (Business Economics & Analytics)
Minor Computer Science

Key Skills: Data Analytics | Data Visualization | Software Development | Data Structures | Algorithms

Software: Databricks | Kubernetes | Docker | Tableau | Apache Spark | Snowflake | AWS | Linux

Languages: Python | TypeScript | SQL | Java | Bash/Shell | Lua | C#

#### **EXPERIENCE**

### Senior Data Analyst, M Science ⋄ Jefferies Bank

June 2021 - Present

- Develop fast & scalable PySpark ETL pipelines for petabyte-scale economic data
- $\bullet$  Investigate & implement AWS and Spark optimizations to reduce ETL job costs by as much as 90%
- Design cluster profiling frameworks to assess compute inefficiency & propose infrastructure solutions
- Build & present Tableau dashboards for pipeline performance analytics & business cost insights

#### Quantitative Research Intern, Wasatch Global Investors

Jan 2020 - May 2021

- Researched portfolio allocation models to fine-tune performance of multi-billion dollar portfolios
- Developed Python/SQL pipelines to ease and automate collection & aggregation of financial data
- Created experiments in Python to adapt network and spectrum analyses to detect asset alpha signals

## Network Research Intern, Utah Center for High-Performance Computing Mar 2019 - Jan 2020

- Built a **Kubernetes/Docker** platform to simplify large-scale distributed scientific app deployments
- Constructed & wrote project documentation site in **React.** is to polish appearance for NSF grants

## INDEPENDENT PROJECTS

#### PointyPal: A Better Online Campus

2020-2021

- Built a class management app to provide students a better online experience through 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 2018

- Remastered a popular Lua game with 8M+ unique plays on the ROBLOX gaming CDN platform
- Engineered project to patch security vulnerabilities and emphasize project maintenance and scalability

## **LEADERSHIP**

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

2019 - 2021

- Created online infrastructure to balance member needs and community safety during COVID-19
- Redesigned governing organization to provide a better environment for org growth & self-governance

## Genomic Data Science Tutoring, University of Utah

2017

- Organized & lead a free Python tutoring group for a graduate genetic anthropology course
- Utilized stochastic learning frameworks to help students understand large genetic systems & data