SPENCER ELKINGTON

Email ◇ Website ◇ LinkedIn ◇ GitHub

Salt Lake City, UT

EDUCATION

University of Utah *Aug 2022*

B.S. Quantitative Analysis of Markets & Organizations
Focuses | Business Economics & Non-Market Environments
Minor | Computer Science

Key Skills: Software Dev | Economics | Data | DevOps | Presentations | Cost Management
Software: GitHub CI/CD | Terraform | Apache Spark | AWS (ECS, CodeDeploy, Cost Management)
Languages: C# | TypeScript | Python | LaTeX | SQL | Bash/Shell

EXPERIENCE

Software Engineer, Backend & DevOps | *Constituent Voice* *Feb 2023 - Present*
- Create **Terraform** deployment systems, reducing blank-slate AWS environment spin-up time by >90%
- Port legacy microservices to **C#** to boost efficiency and capacity of Congressional schedule services
- Oversee creation of documentation-as-code system to alleviate new developer onboarding duration

Founder & Lead Engineer | *Chaotic Good Computing* *May 2023 - Present*
- Consult on game development with a particular focus on managing & monitoring large economies
- Lead a team of two engineers and two asset designers on creating **Roblox** experiences in **TypeScript**
- Provide professional development opportunities for early-career and student developers

Software Engineer, DataOps | *M Science* *June 2022 - Feb 2023*
- Lead implementation of **Spark**/**AWS** optimizations, resulting in seven-figure compute cost reductions
- Construct optimized and durable ETL processes for high-demand video game industry analysis
- Plan & construct unified DataOps infrastructure libraries to streamline financial research operations

Quant Research Intern | *Wasatch Global Investors, $31B AUM* *Jan 2020 - May 2021*
- Researched portfolio allocation models to fine-tune allocation strategy across varied investment styles
- Developed **Python**/**SQL** pipeline infrastructure to automate and backtest financial data analyses
- Designed **Tableau** dashboards to monitor portfolio health & risk throughout pandemic markets

PROJECTS

Using Spark Structured Streaming to Scale Your Analytics | *Databricks Engineering* *June 2022*
- Guest-authored engineering blog post about streaming-based ETL process cost optimizations
- Created informative doodles for maximum information delivery in a minimally professional form factor

PointyPal: A Better Online Campus | *Triangle Engineering* *Aug 2020 - Dec 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 and opened source for use at 4 universities
- Conducted A/B testing to polish user experiences, resulting in peak growth rates of 100 users/mo

LED Music Visualization *Aug 2018 - Nov 2020*
- Created a **C++** and **Python** system for real-time music data analysis and visualizations
- Designed a **Python** music visualization tool for prototyping analysis & visualization algorithms
- Created a novel implementation of low-latency beat signal detection via circular buffers in **C++**

Beethoven | *HackTheU 2019, 2nd Place out of 30 teams* *Aug 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** application stack using **Node.js & React**