Scot Nielson

480-504-9055 • scotnielson616@gmail.com • tscotn.com

Education

Brigham Young University, Provo | GPA: 3.75

January 2019 – December 2022

B.Sc. in Statistics, Data Science Emphasis, Minor in Design Thinking and Computer Science

- Together For Greatness Scholarship, B. John Garrick Scholarship | College of Physical and Mathematical Sciences
- National Statistics Honor Society Member | Mu Sigma Rho
- BYU Data Science Club Hackathon 3 time winner

Skills

Data Science: Python, R, SAS, SQL, DynamoDB, Spark, Pandas

Programming: C++, Typescript, React, Flask, HTML/CSS/Javascript, AWS Serverless, Git

Visualization & Design: Matplotlib/Seaborn/Plotly, Tableau, Figma Languages: Spanish (proficient), English (native)

Relevant Coursework

Statistical and Computer Programming, Data Structures, Discrete Mathematics, Regression and Classification, Big Data Methods, Advanced Probability and Inference, Computational Linear Algebra, ANOVA, NLP, Machine Learning, Tech Interface Design

Experience

Statistics Research Assistant: Podcast Data and Monetization

BYU Department of Statistics

June 2021 - present

- Collected, cleaned, and analyzed 10+ data sets in multiple formats from APIs, databases, online platforms and submissions
- Built personalized insights dashboards and reports for specific podcasts
- Produced, edited and published trial podcast episode to collect sample data and gain personal insight into research questions
- Performed clustering analysis on Spotify dataset of 100,000 podcasts in Python

IT: Software Developer Analyst Intern

Flint Hills Resources, Koch Industries

May 2021 – August 2021

- Implemented filters and custom database query options to Typescript/React/MySQL app for efficient project planning
- Engineered recursive AWS Lambda process to integrate app with database and cloud storage system saving \$5000/month
- Conceptualized scalable data engineering app to process and ensure data quality and visibility of 100s of event schemas
- Consulted on statistical concepts with data teams developing ensemble models for anomaly detection and signal processing

Web Developer & Designer, Data Analyst

BYU Career Services

August 2020 – present

- Designed and developed <u>STEM.byu.edu</u> for STEM education and employment reaching 30,000+ students and employers
- Migrated HTML/CSS/Javascript website to custom CMS, built 4+ JQuery RSS feeds and embedded 50+ Tableau dashboards
- Wrote over 30 informative, personalized and user-friendly pages in collaboration with 15 different departments
- Conducted analytics for and supported 5 websites across BYU campus, conducted interviews for incoming data analysts

Projects

- "Embroidefy" Spotify Code Embroidery Digitizer (Python, Flask) https://embroidefy.herokuapp.com (2021)
- Spotify Wrapped design website https://tscotn.github.io/DigHT%20250/minimal-expression/index.html (2021)
- Chess distance analysis and visualization (Python, Pandas) https://tinyurl.com/3uadf8ww (2021)
- BYUradio Web Automator GUI (Python, Tkinter) https://github.com/tscotn/byuradio-auto-gui (2020)
- Markov Chain Text Generation Twitter Bots (Python, Markovify) (2020-2021)
- Data analytics support for www.peppergroup.ie/ writing scripts, datetime processing/geocoding (SAS, Excel, Python) (2021)
- Cryptocurrency data normalizer and https://tardis.dev/ wrapper converting csv to parquet files (Python, Pandas) (2021)
- LP Graphical Solver Interface in Spanish (Python, Matplotlib, Tkinter) https://github.com/tscotn/programacion_lineal (2021)

Other

Company Outreach Officer SAS Programming Teaching Assistant Student Radio Producer Volunteer Representative in Chile BYU Data Science Club Department of Statistics, BYU Top of Mind with Julie Rose, BYU Broadcasting The Church of Jesus Christ of Latter-day Saints August 2021 – present April 2020 – June 2021 January 2019 – August 2020 September 2016 – October 2019