## **Scott Townsend**

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#### **EDUCATION**

# **Brigham Young University-Idaho**Bachelors of Science: Data Science

Rexburg, ID

April 2022 - April 2025

**Minor: Statistics** 

### **SKILLS**

**Technical Skills** - Machine Learning, Big Data Programming, Linear Regression, Statistical Modeling, Data Wrangling & Visualization, Programming in Python, Data Science Programming, Data Intuition and Insight

Data Visualization: Expertise in Tableau and Power BI for interactive dashboards and insights communication.

Tools - VS Code, RStudio, MySQL, Azure, PostgreSQL, Positron, Databricks, GitHub, and Git for Version Control

**Libraries & Languages** - *Python:* Polars, Pandas, NumPy, Seaborn, Matplotlib, Plotly, TensorFlow, Keras, PyTorch, PySpark, Scikitlearn *R:* tidyr, dplyr, ggplotly, lubridate, stringr, shiny, ggplot2. *SQL* 

Web Development: Familiar with HTML, CSS, JavaScript, and C# for web development.

#### **EXPERIENCE**

## **Marcus Harris Foundation**

December 2024-Present

Rexburg, ID

Data Entry Analyst, Intern

- Harvested data from the IRS tax-exempt organization database, gathering contact information of nonprofit organizations for marketing outreach campaigns.
- Analyzed email marketing campaign data, identifying trends and areas for improvement to enhance user engagement.
- Conducted data-driven analysis to optimize marketing efforts, providing actionable insights to improve campaign performance

## **Brigham Young University - Idaho**

January 2025-Present

Rexburg, ID

Financial and Cost Data Analyst

- Financial & Cost Data Analyst Conducted **cost analysis** and financial forecasting for AI tutor implementation, identifying a cost-saving opportunity by optimizing TA and AI model usage.
- Data-Driven Decision Making Provided **financial insights** and recommendations to support university administration in adopting AI-driven academic support while ensuring FERPA compliance and institutional alignment.

## **SELECTED PROJECTS**

## Streaming Services Data Analysis

January 2025-Present

- Analyzed Netflix, Hulu, Disney+, and Amazon content libraries to uncover trends in movie durations, genres, and ratings using **Polars and Pandas**.
- Visualized insights with **Seaborn, Matplotlib, and Plotly**, including genre popularity, rating distributions, and countrywise content production.
- Built interactive dashboards and statistical summaries to explore streaming service content trends and inform data-driven decisions.

## Image Captioning Tool for Visually Impaired Users

December 2024-Present

- Developed a deep learning model to generate descriptive captions for images, aiding visually impaired individuals and automating social media captioning.
- Implemented a **Convolutional Neural Network** (CNN) for image feature extraction (VGG16) and a sequence model (LSTM/Transformer) for caption generation.
- Visualized model attention areas with heatmaps and presented insights through data visualizations.

### Criminal Incident Data Analysis

November 2024-December 2024

- Developed interactive visualizations in **Python** (Matplotlib, Plotly) to highlight trends in the demographics of offenders and victims.
- Applied data wrangling techniques to identify patterns and trends, offering actionable insights into public safety strategies.
- Analyzed offender-victim relationships to uncover societal trends influencing crime rates.