BRANDON SAMS

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Data Scientist with experience modeling large scale infrastructure, and working on a research and development team.

EDUCATION

Master of Science in Data Science, Bellevue University **2019 – 2021**

- 3.800 GPA

Bachelor of Science in Mathematics with Minor in Communication, Boise State University **2013 – 2017**

- Speech and Debate 2-Time National Champion
- 3.59 GPA
- Honors College Graduate

Valedictorian, Mountain Home Senior High School **2009 – 2013**

CAREER EXPERIENCE

Traffic Technology Services: 2018 - Present

Production Resources Data Scientist **March 2021 - Present**

- Designed, implemented, and documented an automated data pipeline for traffic signal model generation
- Utilized data cleaning methods to ensure model input is complete, accurate, consistent, and uniform

Production Resources Software Developer **September 2020 - March 2021**

- Utilized machine learning models to infer traffic signal behavior
- Developed software with team using version control (git)

Production Operations Specialist **August 2018 - September 2020**

- Worked with agencies to establish Traffic Signal Connectivity
- Developed and implemented quality control metrics for traffic signal predictions
- Windows Server System Administration using PowerShell
- MySQL Database Administration

PROJECTS

Clustering Flight Data Using Experimental Probability Means

Implemented an algorithm that could cluster distributions of data, rather than basic data points. Relied on computing the distance between distributions (Earth Mover's Distance), and centroid computation to cluster airline routes by duration.

Face Mask Detection using Computer Vision

Image processing project that aimed to build a model that could determine if a face in an image was wearing a mask, not wearing it, or wearing it incorrectly. This ternary classifer was built using tensorflow and keras.

Machine Learning in the Search for Prime Numbers

This project aimed to examine how well machine learning and neural networks would perform when trying to detect if a number was prime. A binary representation of a number was fed in as input, and a model was trained to detect if that number was prime or not.

The above projects are part of my Data Science Portfolio, located here: brandonsams.github.io

SKILLS

- Object Oriented Programming: C#, Python
- Data Visualization: PowerBI, Tableau, R
- Scripting: Windows Powershell, Bash, Jupyter Notebooks
- Network tracing: Wireshark
- Strong writing, documentation, and speaking skills
- Ability to work cooperatively in a team environment
- Confident with the Microsoft Office Suite of tools, such as Sharepoint, Dynamics, Flow (Power Automate), Excel

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References Available on Request