Luke Russell Senior Project Proposal

Fall 2023 | Data Science Consultant |DS 499

Personal Background

Luke Russell is a senior studying data science with a minor in sociology. He has completed all major data science courses offered by BYUI including Math 425, Math 350, DS 250, Math 488, DS 460, and CSE 450. Upon graduation, he anticipates entering the data science/analytics or business intelligence field with a major company.

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Project Background

This project will involve me assisting Brother Pacini with his EdD dissertation. I will be taking more of a consultant role because most of the coding and analysis must be undertaken by Bro. Pacini. I will assist in making regression models, explaining results of said models, creating a dashboard for an exploratory analysis, and potentially creating a machine learning model to make predictions based on data.

Domain to Investigate

The subject of this project will be academic data provided by Institutional Data Analysis Services (IDAS) on campus. We will be investigating the performance of graduates from the elementary education program and see if there is a relationship between performance at school, on standardized tests for teachers, on evaluations by mentors, and in the classroom.

Proposed Deliverables

* Create Power BI dashboard for exploratory data analysis.
* Leverage R for statistical analysis and data visualization.
* Apply Python and appropriate packages for machine learning.
* Apply data analytics skills to provide general consultation.

Faculty Involvement

This project will be under the direction of Brother Pacini and supervision of J Hathaway.