Richard Ostberg

Project Proposal

MSDS 692

1. Name, Contact info (e.g. email/phone).

Richard M Ostberg, 303-547-7015, ostbe324@regis.edu

1. Title of the project

Attendance Analysis - Christy Pearson

1. High level description of the project: what question or problem are you addressing?

A screenshot of a cell phone

Description automatically generated

She has specified also that she would like to examine if events such as weather affected attendance.

1. What type of data science task is it?
   * prediction using time series analysis
   * data visualization
2. Data: Brief description of data.

Christy has provided attendance and event data, possibly 100 data points. Additional data points for School and weather events will be collected, possibly another 100 data points. It should take no more than a week to gather the additional data.

1. How will you analyze the data? What machine learning methods do you plan to use, and/or what business intelligence aspect do you plan on incorporating?

I intend to use t-tests and ANOVA to analyze the differentiating events on attendance, and linear regression, or SARIMA modeling to forecast.

1. Describe any anticipated difficulties and problems. Discuss how you may overcome the problems.

I don’t anticipate problems, gathering data. Deciding on collation method may be a challenge. I may pre-process the data into an r-ready format prior to analysis

1. Suggest a timeline for the project.  This should be a weekly breakdown of what you plan on doing each week.

I expect to do data gathering during weeks 2 and 3, data cleaning and prep week 4, Data analysis week 5 and 6, and presentation building in week 7.

Christy has set up a live presentation on March 1.