

Kaelan McGurk Senior Project

Background

I have successfully completed MATH 425 and CSE 450. I very much enjoyed both classes and they really helped me understand base principles of data science. Once I graduate, I plan on working for the company I work for currently; for a time. I work for a Solar and Energy Efficiency company based out of Arkansas. As expected, I make graphics, parse through data, and provide meaningful reports to executives so they can make informed decisions for the company. If I find a different job with a team of data scientists, then I will gladly take it because I feel I would be able to learn more from a team than by myself. My senior project will focus on a project I am working on at my job right now. The sales teams are very interested in which individuals they contact, called leads, will become customers. So, if I can make some kind of machine learning algorithm to accurately predict which leads will become customers, I will be very valuable to the company.

Domain

This project will focus heavily on business analytics. I will work with data that holds which advertisement brought the lead to the company, which sales rep talked to the lead, how quick they were contacted, what date they were contacted, etc.

Deliverables

This project will focus on just about every area of data science that I have been taught: data wrangling, machine learning, database reading, and visualization. The data that I am working with is stored in a relational MySQL database. I will have to link the database to Python to even start working with the data. Once I have the data I will have to clean it thoroughly (the sales reps are not very good at putting clean and consistent data into the database). From there, I will have to find a good machine learning model to predict my desired outcome.

Faculty Request

The three members of faculty that I would like to assist me would be Brother Hathaway, Brother Palmer, and Brother Saunders. Though I would be more than happy with any of these members of faculty I would feel more comfortable with Brother Hathaway simply because I have taken more classes from him.