

## DATA SCIENCE PROJECTS

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### How Safe is a Congressional District?

- Projected winning margins for U.S. congressional elections to determine where party resources and endorsements should be allocated.
- Scraped polling, demographic, candidate, and gerrymandering data using BeautifulSoup and Selenium.
- Built a model using Linear Regression, ridge regularization, and cross validation and achieved an  $R^2$  of .874.

### Sheepshead Companion App

- Developed an app to assist in playing the card game sheepshead.
- Scraped and assembled a database of 50,000 individual hands.
- Utilized image recognition techniques to identify and track cards in play.
- Built a Logistic Regression Classifier with oversampling to determine if a hand should be played.

### Tagging Stack Overflow Questions

- Performed Topic Modeling of Stack Overflow questions to identify the subject and suggest tags for a submitted question.
- Managed data using SQL

## EXPERIENCE

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**Metis** California  
Data Scientist Aug. 2020 to Dec. 2020

Metis is an ACCET accredited 12-week immersive data science bootcamp. Designed and delivered five projects covering statistical modeling, data visualization, machine learning, and app development. **See projects section.**

**Chimera Securities** New York, NY and Chicago, IL  
Proprietary Equity Trader July 2015 to Mar. 2020

- Researched and analyzed individual stocks and overall broad market catalysts, assessing the trading significance and developing detailed trading plans daily
- Executed profitable trading strategies in real time, using Level II price action to minimize risk.
- Rapidly adjusted to changing market conditions and efficiently directed orders to the optimal route and venue.
- Engaged in Merger, Special Situation, Index, and ADR arbitrage.
- Developed trading models targeting Initial and Secondary Public Offerings.

**Piper Products, Inc** Wausau, WI  
Operations Intern Nov. 2012 to Aug. 2013

### SALES

- Researched and developed market analysis summary for yearly school cafeteria equipment purchases in North Carolina to recommend refocusing of sales efforts in the area.
- Sought out school district building projects and referenda for future sales opportunities and filed Freedom of Information Act requests to acquire data when needed.
- Compiled and prioritized customer data for all school districts seeking new development in Texas.

### ACQUISITIONS

- Reviewed records concentrating on fixed assets and inventory.
- Designed and implemented Excel spreadsheet to efficiently and automatically integrate data between incompatible enterprise resource planning systems. Previously this data had been transferred manually.
- Rectified conversion errors in design specifications between differing CAD programs.

## CONTACT

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## SKILLS

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### PROGRAMMING LANGUAGES

Python  
SQL  
HTML  
STATA

### LIBRARIES

Scikit-Learn  
Numpy  
Pandas  
BeautifulSoup & Selenium  
OpenCV  
Statsmodel

### DATA VISUALIZATION

Tableau  
Seaborn  
Matplotlib  
Powerpoint

### MACHINE LEARNING TECHNIQUES

Regression  
Natural Language Processing  
Random Forest  
Supervised/Unsupervised Learning  
Clustering  
Dimensionality Reduction  
Web Scraping  
Neural Networks

### CLOUD

AWS  
GoogleCloud

## EDUCATION

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University of Wisconsin -  
Madison  
B.S. Economics - Mathematical  
Emphasis 2014