SAM MUSCH
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EDUCATION

UNIVERSITY OF MINNESOTA, Minneapolis, MN
Carlson School of Management
Candidate for **Master of Science in Business Analytics** May 2020

UNIVERSITY OF NEBRASKA OMAHA, Omaha, NE
College of Business Administration
Economics (BSBA) May 2019
Magna Cum Laude *ETS Business Exam: 97th percentile*

EXPERIENCE

CARLSON ANALYTICS LAB, Minneapolis, MN
Analytics Student Consultant July 2019 – Present
Client: Leading Hospitality and Entertainment Business

- Increased revenue by est $1.4M / month by identifying high value customers and reducing attrition
- Used clustering, decision trees, Poisson Regression to identify these customers
- Led team in creating visualizations and transfer documents to keep technical info clear

Client: Mall of America (Exploratory Analytics)

- Saved est $5M / year with predictive model to optimize number of hourly staff
- Built user-adjustable Tableau heatmap to improve staff location within mall

UNIVERSITY OF NEBRASKA OMAHA, Omaha, NE
Men's Golf Team (NCAA Division 1 Program) August 2015 - May 2019

- Played four years, named team captain by head coach for final two years
- 1 of 5 players in conference named All League for academics and individual play
- Built Tableau dashboards following tournaments to improve on software used by team

TOOLS & APPLICATIONS | *Portfolio: sammusch.github.io/projects*

- Python, Rstudio, SQL, Tableau, Microsoft Suite (Microsoft Excel, Word, Powerpoint, Access)
- AWS (S3, SageMaker), Spark, Hive, Hadoop, Linux, Git

Crime in Minneapolis (Team)

- Built XGBoost model in AWS with Sklearn to predict daily crime per police precinct within 25%
- Included daily tweet sentiment, neighborhood poverty measures and weather information
- Used Tableau to display past trends and run time lapse throughout the year

Japan Restaurant Forecasting (Team)

- Researched and identified culture specific factors to include in predictive model
- Helped create ensemble of LSTM and RNN models to predict daily traffic within 20%

Stedman's Café Consulting (Undergrad, Team)

- Used SQL, R and Tableau to identify high-profit margin item
- Established ETL code and clear notes to handle messy data for future teams to build on
- Posted visuals and worked with cafe team to make sure analysis was clear and actionable