

# SAM MUSCH

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## SUMMARY

Self-motivated, team-oriented Data Scientist / Analyst passionate about solving business problems with analytics. With a BS in Economics/Business Administration coupled with an MS in Business Analytics, I bring an effective blend of both strategic thinking and technical skills.

## SKILLS | [public.tableau.com/profile/sam.musch#!/](https://public.tableau.com/profile/sam.musch#!/)

- Python (1 year), R (2 years), SQL (2 years), Tableau (2 years)
- AWS (S3, SageMaker), Spark, Hive, Hadoop, Linux, Scikit-Learn, Jira, Google Analytics, Excel
- SVM, XGBoost, Clustering, Anomaly Detection, PCA, ARIMA, Causal Inference

## EXPERIENCE

CARLSON ANALYTICS LAB, Minneapolis, MN

**Analytics Student Consultant**

July 2019 – Present

**Client: Largest Alumni Association in Minnesota**

- Manually created “categories” from past logs of user behavior - text matched keywords on file of >75M rows
- Developed clusters based on member’s per-category behavior to improve solicitation relevance
- Increased revenue by \$200k/year by implementing predictive model & clusters, presented findings to University Board of Regents (Team was awarded top overall presentation in our program)

**Client: Leading Hospitality and Entertainment Business**

- Identified likelihood of churn with use of Poisson Regression, mapped most successful incentives based on the person’s behavioral and demographic characteristics
- Increased revenue by est \$1.4M / month (assuming 10% reduction in attrition)

**Client: Mall of America (Exploratory Analytics)**

- Improved staff location within mall with user-adjustable Tableau heatmap
- Saved est \$2M / year in with predictive model and insights into staffing inefficiencies, presented findings to client

ECONOMICS DEPARTMENT, Omaha, NE

**Student Consultant - Economics**

Jan 2019 – May 2019

**Client: University of Nebraska Omaha, Stedman’s Cafe**

- Established data cleaning template to measure KPIs and match inventory items with POS system
- Built and published Tableau dashboards to visualize performance of high profit-margin goods

## EDUCATION

UNIVERSITY OF MINNESOTA, Minneapolis, MN

Carlson School of Management

**MS in Business Analytics**

May 2020

UNIVERSITY OF NEBRASKA OMAHA, Omaha, NE

Economics, BS in Business Administration

*Magna Cum Laude*

May 2019

## PROJECTS | [sammusch.github.io/projects](https://sammusch.github.io/projects)

Marketing Campaign Evaluation

- Created pseudo experiment from existing data across campaigns with “matching” techniques
- Applied “differences-in-differences” to identify successful subgroups for future targeting

## LEADERSHIP

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 - combination of academics and individual play
- Built Tableau dashboards following tournaments to improve on software used by team