

APPLIED MATH & STATISTICS MAJOR · ECONOMICS MAJOR · JAPANESE MINOR · MACALESTER COLLEGE

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## Education \_

**General** GPA: 3.89 · Graduating May 2021 · Dean's List

**Coursework** Econometrics · Correlated Data · Mathematical Statistics · Bayesian Statistics ·

Differential Equations · Linear Algebra · Money & Banking

**Activities** Asian Pacific Month Planning Board · X-ertion Dance Club · Japanese Conversation Circle Leader ·

**Econometrics and Probability Theory Teaching Assistant** 

## **Experience**

**3M** Saint Paul, MN

#### DATA SCIENCE INTERN - FINANCE DATA ANALYTICS TEAM

May 2019 - Aug 2019

- Developed proprietary time-series forecasting algorithm and front-end web application for divisions' sales
- Automated manual forecasting and reporting processes which took days for each of the several divisions
- Carefully documented work-flow for team to create and deploy data applications in Flask and IIS Server
- Participated in outreach and consulting to aid other business functions and increase visibility within 3M

Minnesota Wild Saint Paul, MN

### HOCKEY ANALYTICS INTERN - HOCKEY OPERATIONS TEAM

Jan 2019 - May 2019

- Analyzed years of NHL play-by-play data to deliver a research insight for Operations
- Fit a **Bayesian regression** to infer difficulty of completing a play
- Presented interface that evaluates player performance based on the difficulty inference model

Lab 651 Saint Paul, MN

#### SOFTWARE ENGINEER - HOME APPLIANCE API TEAM

Aug 2018 - Jan 2019

- Built and managed Rails APIs for Internet of Things devices serving 10,000+ users
- Extracted and cleaned large unstructured data from PostgreSQL and Redis databases
- Worked within a **DevOps** environment, delivering software consulting to global enterprises

**Jot: Write on Time** Saint Paul, MN Jun - Aug 2018

#### FOUNDER & FULL STACK DEVELOPER - STARTUP

- Created a platform for writers to share & critique writing and form online writing circles
- Built a RESTful Rails application, utilizing PostgreSQL and React. is for front-end
- Worked as a **2 person** team through MacStartups, a start-up accelerator program,

## Skills\_

**Programming** Python · NodeJS · Java · HTML/CSS/JavaScript · Bash **Analytics** R/Shiny · SQL · Tensorflow · Jupyter · Plotly · Matlab **Web & Media** Express · D3 · React.js · Django · Ruby on Rails · LaTeX

# Projects \_

## Transit Bayes - (sonkphan.com/project/transit-bayes/)

- A Bayesian analysis on the effect of transit accessibility to real estate price
- Wrangled transit GTFS data files and geocoded home location coordinates
- Work is an extension of Pilgram, West from Regional Science and Urban Economics

## **Randomness in Sport**

- Research explores the idea of volatility of match outcomes across the major North American sports
- Learned about and implemented a variety of ranking and rating models in R
- Preparing for submission to various sports statistics journals and conference