

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

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| In sonkphan

Education _

General GPA: 3.82 · Graduating May 2021 · Dean's List

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

Differential Equations · Linear Algebra · Economics of Public Policy

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

Econometrics and Probability Theory Teaching Assistant · Independent Research (Statistics)

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
- Presented work and consulted 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 hierarchical 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 · Stata · SQL · Tensorflow · Jupyter · Plotly · Matlab

Web & Media Express · D3 · React.js · Django · LaTeX

Projects _

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

- A hierarchical Bayesian analysis on transit accessibility's impact on real estate price
- Scraped/cleaned transit GTFS data and geocoded home location coordinates
- Work is an extension of Pilgram, West from Regional Science and Urban Economics

Transit Shocks and Urban Traffic Congestion

- Capstone research on the effect of transit shutdowns and expansions on surrounding congestion
- Implemented various model approaches to account for spatial dependency and confounding in R
- Created comprehensive policy brief on traffic and public transit subdomain
- Utilized data from Uber Movement, AAA, and the Urban mobility report