

# Son Phan

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

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## Education

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**General** GPA: 3.84 · 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 Team · Japanese Conversation Circle Leader

## Experience

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### 3M

*Saint Paul, MN*

DATA SCIENCE INTERN - FINANCE DATA ANALYTICS TEAM

*May 2019 - Aug 2019*

- Led an end-to-end project to automate financial forecasting and reporting
- Developed proprietary time-series forecasting algorithm and front-end interface for all divisions
- Created work flow for team to create and deploy data applications in **Flask**
- Worked on department re branding and outreach to other departments to 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*

FOUNDER & FULL STACK DEVELOPER - STARTUP

*Jun - Aug 2018*

- Created a platform for writers to share & critique writing and form online writing circles
- Built a RESTful **Rails** application, utilizing **PostgreSQL** and **React.js** for front-end
- Led successful testing campaign, reaching out to **500+ writers** to test application
- Worked as a **2 person** team through start-up accelerator program, MacStartups

## Skills

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**Programming** Python · NodeJS · Java · HTML/CSS/JavaScript · Bash

**Analytics** R/Shiny · SQL · Tensorflow · Jupyter · Plotly · Matlab

**Web & Media** Express · D3 · React.js · Django/Pyramid · Ruby on Rails · LaTeX

## Projects

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### Transit Bayes - (<https://sonphan.netlify.com/post/transit-bayes/>)

- A Bayesian analysis on the effect of transit accessibility to real estate price
- Cleaned through transit GTFS data files and geocoded home location coordinates
- Inspired by **Pilgram, West** from Regional Science and Urban Economics

### Randomness in Sport

- Research explores the idea of variance across different major North American sports
- Modeling team strength within leagues to gauge the variance of outcomes i.e. large upsets
- Preparing abstract and preliminary drafts for submission to various sports statistics journals

