

## EDUCATION

### Northwestern University | GPA: 3.76/4.00

B.S. Computer Science & Economics 2019

#### Kellogg Certificate Program in Managerial Analytics

Relevant Coursework: • Data Structures & Data Management • Intro Artificial Intelligence • Object Oriented Programming • Machine Learning • Deterministic Models & Optimization • Econometrics

## SKILLS

### TECHNICAL LANGUAGES

Proficient: Python, HTML, CSS

Familiar: C++, Racket, Swift, Matlab

### MISC.

Pandas, NumPy, Tensorflow

Git, Unix, Linux

### NATURAL LANGUAGES

English

Cantonese

Mandarin

## WORK EXPERIENCE

### Argonne National Laboratory Machine Learning Research Intern

Lemont, Illinois  
June 2017 to September 2017

- Built and applied multiple machine learning algorithms to characterize problem features associated with errors in linearizations of electric power flow equations under mentorship of Dr. Daniel Molzahn.
- Developed a neural network, using Python and Tensorflow, to predict optimal power generation and line flows, with under 1% error; Generated and compiled the datasets using IEEE test cases on Matlab and MatPower.

### PNT Financial Software Engineering Intern

Chicago, Illinois  
June 2016 to September 2016

- Spearheaded project for optimizing a trade currently in production; Collaborated with traders daily to integrate trading logic.
- Performed complex analysis of large time-series data sets to design algorithms on Python identifying key patterns & impacts of economic releases for 100+ foreign exchange securities.
- Wrote 500+ lines of code in bug fixes & integral features for PNT's proprietary back-testing framework used to test firm's high & low frequency trading strategies.
- Automated entire firm's bookkeeping process by developing two programs to parse over 1300 brokerage PDFs daily and format extracted data into Excel; Enhanced efficiency of 25 hr bookkeeping process to under 10 min.

## PROJECTS

### Bot It: (Best Overall Underclassman Project at IEEE Project Showcase)

- Built bot on Python and Django to automate process of purchasing highly demanded, limited release sneakers.
- Utilized external Captcha token generation to bypass Captcha, jump the query, and add items to cart, bolstering the probability of successfully purchasing limited sneakers.
- Pitched idea to The Garage, a startup incubator at Northwestern, and was accepted to be a resident team for spring quarter.

### Weight Watcher : (Communications Award Winner at Northwestern's Annual Design Expo)

- Engineered a design for the Rehabilitation Institute of Chicago to measure weight offloaded by a bodyweight support treadmill, sending live data to locally hosted site for physical therapists, in a 3-person team.
- Awarded Communications Award at NU's Design Expo for best presentation & documentation of design out of 60+ engineering teams.

## LEADERSHIP & ACTIVITIES

### NU Space Technology and Rocketry Society (NUStars) · Project Manager: Near Space Exploration Team

March 2016 to Current

- Built the Near Space Exploration Team (NSET), overseeing all aspects of research, development, and recruitment.
- Engineered high-altitude balloons to conduct scientific experiments at 100,000+ ft altitude, completing 3 successful launches
- Managed and maintained NUStars website, updating regularly with teams' progress and photos.

### IEEE · Exec Board

September 2016 to Current

- Organize and promote school-wide hackathons, tech talks, and programming sessions with team of 10.
- Piloted a program to gather 8 teams of students together to collaborate on various programming projects.

### Resident Assistant

August 2016 to Current

- Mentor, advise, and engage 500+ students with team of 16, planning weekly community builders & area programs.

## ADDITIONAL

### Awards

4x Dean's List Recipient, Best Overall Underclassman Project (IEEE Project Showcase), Communications Award Winner (Northwestern Design Expo), Gold Award (Illinois Junior Academy of Science State Exposition), National AP Scholar,

### Interests

Watching Youtube vlogs; Analyzing lyrics on RapGenius; Playing w/ fidget spinners; Basketball & Track (13th in state IL 2A for the Mile)