

## EDUCATION

University of Pennsylvania *The Jerome Fisher Program in Management and Technology (May 2020)* *GPA: 3.82/4.00*

- The Wharton School | Bachelor of Science in Economics concentrating in **Operations, Information and Decisions**
- School of Engineering and Applied Science | Bachelor of Science in Engineering majoring in **Computer Science and Cognitive Science**

**Awards/Honors:** Dean's List 2017-2018, IEEE Eta Kappa Nu Engineering Honor Society

## SKILLS

**Selected Coursework:** Machine Learning, Computer Vision, Computer Graphics, Database and Information Systems, Algorithms

**Languages:** Java, Python, C, C++, C#, SQL, R, MATLAB, HTML, CSS, JavaScript, MongoDB, OCaml, LaTeX, GLSL

**Technologies:** Git, Scikit-Learn, Pytorch, Keras, TensorFlow, OpenCV, Node.js, Express.js, React, jQuery, Mongoose, Bootstrap, Qt

**Applications:** Microsoft Office, Tableau, Photoshop, Illustrator, InDesign, Premiere Pro, Unity, Autodesk Maya, AutoCAD

## WORK

**Capital One Financial Corporation, McLean, VA** *Jun 2018 - Aug 2018*

**Product Management and Analytics Intern**

- Trained SVMs and neural nets for predicting collections cures with **Scikit-Learn, Keras, and TensorFlow** which boosted accuracy by **8.6%**
- **Consulted 8+ VPs and managers** on strategy by synthesizing competitive intel in debt collections of **25+ banks and Fintechs**
- Queried, cleaned, and preprocessed customer datasets with **over 11 BN indexes** using **SQL, Apache PySpark and Pandas DataFrames**

**Students Federal Credit Union at the University of Pennsylvania, Philadelphia, PA** *Sep 2016 - Present*

**Director of Machine Learning and Data Science**

- Spearhead **13-person team** for initiatives such as using k-means clustering for customer segmentation and anomaly detection on ledgers
- Partnering with credit union with **\$2 BN AUM** and **150k+ customers** for card fraud detection using random forests and XGBoost
- Architected **MySQL** database with **8 years of data** and built **Tableau** dashboards to gain business intelligence to aid **1400+ customers**

**Chief Information Officer of the Board of Directors**

- Directed **2 divisions of 28 analysts** (raised minority representation by **18%**) to maintain cybersecurity and accounting for **\$7.1 MM AUM**
- Automated inquiries with a NLP chatbot, **awarded \$10,000 NCUA digital services grant**, and used Agile to **triple projects completed**

## RESEARCH

**World Well Being Project, Penn Positive Psychology Center, Philadelphia, PA** *Dec 2018 - Present*

**Research Assistant in Automated Machine Learning**

- Write Python scripts to use auto-sklearn to benchmark over **200 datasets** developed from the university's Computational Genetics Lab
- Investigate multimodal models (ensembling and group lasso) and dimensionality reduction (PCA and CCA) to improve phone data models

**The Learning Lab at the Wharton School, Philadelphia PA** *Jul 2017 - Jan 2019*

**Research Assistant in Augmented Reality Education Technology**

- Launched **Docker** containers to harvest **100K+ datapoints** via **Twitter API** for sentiment analysis using open source software (GWU-SFM)
- Developed a deep LSTM-RNN with **PyTorch** (trained on **1.6 MM sentiments**) to classify sentiments of **50k tweets** on the AR/VR market
- Collaborated with Wharton faculty to design an AR app with **Unity, C#, and Vuforia** to enhance statistics lecture on multivariate regression

## PROJECTS

**SoleProvider | Backend Developer** *Mar 2019*

- A SMS chatbot service co-developed with a team of three students that uses **Python Flask, Google DialogFlow API, and Twilio API** that allows the homeless to request basic needs, submitted to the inaugural Philadelphia Sustainable Solutions challenge to solve the UN's SDGs

**DearAI | Web Developer** *Feb 2019*

- A journaling web-app co-developed with **4 students** using **HTML, CSS, Node.js, Express.js** and **React** that uses **IBM Watson Tone Analyzer API** to recommend activities to improve mental health, which won **top 5 hack** and **best entertainment hack** awards at PennApps XIX

## LEADERSHIP AND VOLUNTEERING

**IEEE - Eta Kappa Nu Honor Society | Secretary of the Board and Webmaster** *Apr 2018 - Present*

- Collaborate with 7-person board to spearhead a newsletter campaign to **100+ current members** and host corporate workshops

**Science Olympiad at the University of Pennsylvania | Head Volunteer Coordinator** *Sep 2016 - Feb 2019*

- Organized **100+ volunteers** to run a STEM tournament with **850+ competitors nationwide** and increased YOY sponsorships by **24%**

**Pan-Asian American Community House Peer Mentoring Program | Vice Chair of Leadership** *Apr 2017 - Apr 2018*

- Programmed monthly leadership seminars and co-built the website for an Asian-Pacific Islander mentorship organization with **40 students**