
Education

- September 2019 to Present **M.A. in Statistics (Expected December 2020)**, *Columbia University*, New York, NY, USA.
- GPA: 4.00
 - Awards and Honors:
 - First Place: DataFest Fall 2019
- September 2014 to April 2018 **B.S.E. in Data Science**, *University of Michigan*, Ann Arbor, MI, USA.
- Minor in Mathematics
 - GPA: 3.31 *Cum Laude*
 - Awards and Honors:
 - Dean's Honor List: Fall 2017, Winter 2018
 - University Honors: Fall 2017, Winter 2018
 - Best Software Award: iGEM Competition 2016
 - Gold Medalist: iGEM Competition 2016, 2017

Core Competencies

- **Programming Languages:** Python, R, SQL, Javascript
- **Skillsets:** Data Mining, Machine Learning, Data Visualization, API Development, Project Management
- **Technologies:** Numpy, Pandas, fastai, Django, React, Chart.js

Experience

- June 2018 to July 2019 **Data Scientist**, *Algo.ai*, Troy, MI, USA.
- Lead design and implementation of new forecasting modules, improving accuracy by 12% over original forecaster
 - Appointed customer-facing technical lead of behind-schedule demand planning project, successfully completing the project on time by incorporating new development and requirements-gathering practices
 - Optimized and corrected SQL in daily ETL processes, lessening system strain and reducing processing errors
 - Mentored new employees through on-boarding process with pair programming exercises, overviews of relevant statistical concepts, and one-on-one meetings to discuss progress
- May 2018 to January 2019 **Student Researcher**, *University of Michigan*, Ann Arbor, MI.
- Independent research under Dr. Yves Atchade to explore multinomial bayesian models for cancer-type classification.
- Researched literature on similar models and analysis of reverse phase protein array (RPPA) data
 - Derived and implemented preliminary classification model, including optimizations for computational efficiency
 - Enhanced original model using spike-slab priors to account for sparsity, in addition to Polyagamma augmentation to yield a closed form posterior for binary case
- September 2017 to April 2018 **Research Assistant**, *Center for Molecular Imaging*, Ann Arbor, MI, USA.
- Student position to support Dr. Craig Galban and his team in medical imaging data analysis.
- Designed and implemented application to automate processing of new data sets, saving time and reducing errors
 - Built tool consolidating all image analysis scripts into single view, streamlining process flow
 - Assist in the preparation of incoming datasets, including orienting, rotating, and cropping of images
- May 2017 to August 2017 **Machine Learning Engineering Intern**, *Algo.ai*, Troy, MI, USA.
- Integrated statistical clustering methods into API, enabling on-demand analysis of store performance data
 - Developed proof-of-concept system to automate unit testing, simplifying deployment and reducing bug reports
 - Wrote web scraper to augment available customer data using information from Rotten Tomatoes and IMDB, retrieving movie meta data information including genre, ESRB rating, box office, director, and audience response
 - Built process to export customer data in email and powerpoint formats, allowing results to be readily shared
- January 2017 to December 2017 **Student Researcher**, *ProQuest*, Ann Arbor, MI, USA.
- Student-run research project to improve the pharmaceutical literature review process using machine learning.
- Researched natural language processing literature to determine appropriate algorithms; final model used GloVe embedding with an LSTM architecture to determine if an article should be reported to the FDA
 - Designed data normalization process to simplify training and streamline implementation of production system
 - Implemented final algorithm to perform document classification, achieving 80% precision and 96% recall
 - Organized meetings with team members, company sponsors, and faculty advisers to report and present progress

Additional

- Proficient in Arabic, ranked 9th in 2014 national French competition Le Grand Concours
- Enjoy NBA basketball, rooting for the Toronto Raptors since 2012