Nicholas C. Gawron

nickgawron@gmail.com | linkedin.com/gawronDS | github.com/ncgawron/Projects| 908-415-0575

Education

Masters of Statistics, *NC State University* May 2023
Bachelor of Science, Mathematics, *NC State University* May 2022
- Minor, Statistics GPA: 4.0/**4.0**
- Mathematics Honors Program and Phi Betta Kappa

Experience

Data Analyst, *NC State Poole College of Management* Aug 2022 - Present
- Collect, organize, and analyze over 1 million student records via SQL Queries from a variety of uncleaned data sources on registration, enrollment, student academic success, and courses
- Build classfication models to predict student success given course-loads, demographic and academic background to improve student advising
- Design and develop analytical software, Shiny App, addressing advising problems that have a direct impact on client success
- Create data visualizations and analyses for various departments Desktop Dashboards

Graduate Machine Learning Intern, *Laboratory for Analytical Sciences* May 2022 - Aug 2022
- Produced a likelihood-ratio hypothesis test for extracting topic applicable phrases improving for text summarization by 5%
- Employed Encoder-Decoders, and transfer learning techniques for extractive text summarization, and relationship extraction via topic modeling in cloud AWS environment
- Leveraged deep learning math libraries such as Tensorflow, Pytorch, and Keras for text mining and analysis with NLTK
- Presented to non-technical NSA Intelligence Analysts and Leadership about optimal data pipeline

Research Assistant, *State Climate Office of North Carolina* Oct 2021 - May 2022
- Developed hands-on data science workshop including data science tutorials catering to an industry and academic audience
- Crafted Climate Science Case Study: use of K-means clustering and time series forecasting of NC county rainfall and crop development
- Analyzed learning assessment/sentiment survey data and summarized results in a final workshop report

Applied Statistics Researcher, *Worcester Polytechnic Institute* June 2021 - Aug 2021
- Improved forecast accuracy of time series model by 20% by employing robust dimension reduction
- Implemented a Robust PCA and Deep Autoencoders combined method, via Keras, TensorFlow and scikit-learn, used in dimension reduction and estimation of financial returns
- Detected decorrelation events, and conducted quantitative analysis 11+ years of financial time series data for predictive models via Python and R
- Conducted analysis from data and business stakeholder Wellington Management

Projects

Bootstrap Estimation Method Comparison | *tidyverse, ggplot2*
- Created visuals and a report to show usefulness of nonparametric and parametric bootstrap in estimation and statistical inference for simulated data

Nonparametirc Regression Shiny App | *shiny, caret*
- Created a Shiny App showcasing effectiveness of non-parametric regression methods on housing data
- Hyperparameter tuning and model diagnostics are shown, visualizing bias variance trade-off