# ANDREW G. ARGEROS

Dedicated and driven current undergraduate student with a passion for statistical, analytical, and machine learning approaches to modern issues. Enjoys problem solving through data driven thinking and computational methods.

Skilled in applications of R, SQL, and Python. Avid presenter at national data science competitions and academic conferences. Looking to gain experience in the corporate sector and to further skills in machine learning at scale.

**EDUCATION** 

2022 (exp.) 2018 B.S. Computational Data Science; B.B.A. Business Analytics; Minor in **Economics** 

Hamline University

St. Paul. MN

- Advisors: Dr. Stacie Bosley and Dr. Andy Rundquist
- President's Scholarship Recipient & Heim Scholar
- NCAA Varsity Athlete: Men's Tennis

2018 2014

**High School Dipolma** 

Coon Rapids High School

Coon Rapids, MN

- · Graduated with Honors
- Two time National AP Scholar with Distinction

# ☐ RESEARCH & TEACHING EXPERIENCE

Current 09/2021 Teaching Assistant: QMBE 3740 - Data Mining

Hamline University

St. Paul, MN

· Assisting Dr. Brett Devine in teaching 33 students concepts of data science and machine learning in R. Course covers topics such as data quality, supervised regression and classification, and unsupervised clustering and text mining.

Current 01/2020 Research Assistant to the Dean

Hamline University School of Business

St. Paul, MN

- Hired in 2020 for ad hoc data science needs in the Hamline Business School. Responsibilites include working closely with Dean McCarthy, Support Staff, and Faculty to effectively manage and deploy analyics and data science projects.
- Student Analytics Director of DAC @ Hamline high school data analytics competition.

05/2020 01/2019 Research Assistant to Dr. Eric Hammer

Hamline University School of Business

- St. Paul. MN
- · Analyzed modifications to inputs of Hawk/Dove game theory model through use of agent based simulation modeling.
- Planned collaboration on a project studying cultures' proverbs and "pop-culture" on voting behavior. Based on the work of Michalopoulos and Xue (2017) on the effects of folklore on rational voting theory.

View this CV online with links at andrewargeros.com/cv

### CONTACT

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### PROGRAMMING

R	
Python	
SQL	
Javascript	
Julia	

## LANGUAGES

Spanish	
Greek	

Made with the R package pagedown.

References are available upon request.

Last updated on 2021-09-30.

# INDUSTRY EXPERIENCE

Current | 02/2020

#### Data Science Intern

#### ExceleraRx LLC - Shields Health Solutions

Minneapolis, MN

- Currently directing and implementing at-scale analytics and production grade machine learning systems affecting major health systems, pharmaceutical manufacturers, payers, and pharmacies in the realm of specialty pharmacy.
- Built machine learning systems to identify patients at risk for inadherence in subpopulations of metastatic breast cancer and hepatitis C patients. Currently in production at several national health systems.
- Built a production string matching system using Zero Shot Natural Language Processing to match raw prescription text to analyzable data using serverless computing systems.

01/2021 | 10/2020

### Consultant Data Scientist

#### **Economic Development Company of Lancaster County**

Q Lancaster, PA

- Used advanced Natural Languange Processing (NLP) and Computer Vision (CV) methods to analyze real-estate trends within the county. Lead a research project to be presented to Lancaster developers and realtors.
- Developed a cohort of similar communities to Lancaster, PA using T-Distributed Stochastic Neighbor Embedding (T-SNE) and Density Based Stochastic Clustering (DBSCAN) on Census data.

02/2020 | 11/2019

#### Consultant Data Scientist

#### Minnesota Hospital Association

St. Paul, MN

- · Analyzed workforce data on MHA's members for the assocation's annual workforce review.
- Presented analysis to statewide health system leaders.

01/2020 | 09/2019

#### Financial Planning & Analysis Intern

Northwestern Mutual

Minneapolis, MN

- Worked on a team of six to analyze, forecast, and manage the financial outlooks of more than two thousand clients across the country. Oversaw client investment processes from onboarding through investment and rebalancing.
- Used basic forecasting techniques (ARIMA, Exponential Smoothing, etc.) to show trends in portfolio growth, client uptake, and advisor put-through.
- Built a production invoicing system using R and Shiny to effectively manage the department's billing and receivables.

# SELECTED DATA SCIENCE PROJECTS

06/2021

# Compliance to Recommended Tuberculosis Screening Prior to Initiating Biologic Treatment Across a Network of Health System Specialty Pharmacies

Pharmacy Quality Alliance Annual Meeting and Conference

Virutal

- Analyzed effects of date-verified screening for tuberculosis patients within the Excelera Network with respect to patient adherence and outcomes.
- Listed as acknowledgment due to lack of pharmaceutical degree.

**March Madness** 03/2021

Virutal MinneMUDAC 2021

- Built a machine learning system based on bootstrapped random forests to accurately predict game outcomes in the 2021 NCAA Men's Basketball Tournament. Coauthor Max Bolger.
- Finished in top 25% of participating teams both graduate and undergraduate.
- Bracket finished in 90th percentile of ESPN's Tournament Challenge.

11/2020

#### MLB Team Success: Offense vs. Defense

The Federal Reserve Bank of Minneapolis

Minneapolis, MN

- · Analyzed the importence of different statistics on predicting Win/Loss percentage and strategic paradigm shift in MLB. Coauthors Ryan Brauer and Jake Dujmovic.
- First Prize Winner at Minnesota Economic Association General Conference

11/2019

#### Forecasting Soybean Futures: Prophet & VAR

MinneMUDAC 2019

• Eden Prairie, MN

- · Accurately forecasted the price of three target soybean futures securities. Model comprised of an ensemble of Facebook Prophet and Vector Autoregression. Model Accuracy ~99.5%. Coauthors Lindsey Hawk and Lindsay Steiger.
- 2nd Place Overall & Analytical Acumen Award Winner
- Invited to present to industry leaders at FASTCON 2020

05/2019

### The Future of Renewable Energy in New York City

BAC @ MC 2019

New York City, NY

- Optimized and analyzed a solution to convert half of New York state's energy needs to renewable energy. Coauthors Shanoah Harren, Lindsay Steiger, and Leah Wenner.
- 4th Place Overall



# **■** PUBLICATIONS

03/2021

### Dermatology Landscape: Continued Growth Within the Excelera Network

ExceleraRx and ShieldsRx Blogs

· Coauthor with Angela Ouyang

07/2020

#### COVID & Oncology – The Effects on Health System Specialty Pharmacies

ExceleraRx Blog

06/2020

Predicting Inactivity in Oncology Patients: Machine Learning Classification in The Excelera Network White Paper