

DANIEL MOSCOE

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SUMMARY

Experienced math educator pivoting to a career in data science. Master's degree in Data Science completed 12/2021. Specializing in data visualization and analytics, predictive modeling, and inferential statistics to drive evidence-based decision-making.

SELECTED PROJECTS

Please see portfolio at dmoscoe.github.io

Predicting Academic Outcomes with DAACS

- Developed an early alert system for academic risk, directing support to students before they fail a course
- Predictive models combine linear, tree, and non-parametric components
- Implemented in R on Amazon Elastic Compute Cloud

EIA Explorer

- Designed interactive visualizations on the web to show electricity generation dynamics across the US
- Implemented in Python with Pandas and Plotly

Moneyball

- Led a team of classmates to predict the performance of baseball teams
- Used R to perform feature engineering and construct linear regression models to minimize root mean square error

Telecom Churn Analysis

- Predicted which customers will attrite based on account information and local market research
- Used R to perform feature engineering and construct and evaluate logistic regression and random forest models

EDUCATION

City University of New York , School of Professional Studies	New York, NY
<i>Master of Science in Data Science</i>	2021

- Coursework includes Statistics, Python Programming, Simulation and Modeling Techniques, Predictive Analytics, Data Visualization

City University of New York , Hunter College	New York, NY
<i>Advanced Certificate in Computer Science Education</i>	2021

- Developed pedagogical strategies for intro CS concepts using Java and Python

City University of New York , Hunter College	New York, NY
<i>Master of Arts in Adolescent Mathematics Education</i>	2010

Cornell University , College of Agriculture and Life Sciences	Ithaca, NY
<i>Bachelor of Science in Applied Economics and Management</i>	2005

EXPERIENCE

Diagnostic Assessment and Achievement of College Skills (DAACS)

New York, NY

Data Analyst

2021

- Developed predictive models of undergraduate academic outcomes using R on Amazon Elastic Compute Cloud
- Presented findings directly to stakeholders at undergraduate institutions

Columbia Secondary School

New York, NY

Math Department Chair, Math Teacher

2015-2020

- Developed innovative curricular materials with a dual focus on mathematical rigor and effective communication
- Led professional development on evidence-based practices for effective feedback
- Strategized with administrators to coordinate instructional themes across content areas for middle school and high school
- Earned highest performance rating 2015-2020

William W. Niles School

Bronx, NY

Math Teacher

2011-2015

- Implemented standards-based grading with custom progress reports and individualized feedback using Microsoft Access
- Math for America Early Career Fellow

New Roots Charter School

Ithaca, NY

Math Teacher

2010-2011

- Founding geometry teacher
- Mentored students in advisory

ADDITIONAL INFORMATION

- New York Teacher Certification, Mathematics, grades 7-12; Computer Science, grades K-12
- Professional proficiency in Microsoft Excel
- Intermediate proficiency in SQL