

# Nicholas J Morris

DATA SCIENTIST

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GREATER BOSTON AREA

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## Professional Summary

I'm looking for a job where my analytical skills can be a part of contemporary solutions that make improvements while preserving valuable aspects of the work environment. In this job I would create computer mathematical models that represent knowledge from people, literature, and available data.

Experienced Scientific Programmer with a demonstrated history of working in the Computer Software industry. Skilled in Continuous Improvement, Machine Learning, Optimization. Strong engineering professional with a Bachelor of Science, Master of Engineering, Doctor of Philosophy (Uncompleted) all focused in Industrial Engineering from Rochester Institute of Technology.

## Scientific Programming

*Mar-2014 – Present (6 yr 6 mo)*

- Machine learning in R and Python
- Deterministic optimization in Python and AMPL
- Discrete event simulation in Simio
- [github.com/N-ickMorris](https://github.com/N-ickMorris)

## Education

Undergraduate/Graduate Student

*Rochester Institute of Technology, Rochester NY, Aug-2011 – Nov-2018 (7 yr 4 mo)*

- Bachelor of Science in Industrial Engineering, Aug-2011 to May-2017, 3.46/4.00
- Master of Engineering in Industrial & Systems Engineering, Aug-2015 to May-2017, 4.00/4.00
- Doctor of Philosophy in Engineering (Uncompleted), Aug-2017 to Nov-2018, 3.06/4.00

## Work Experience

Data Scientist

*Aspen Technology, Bedford MA, Mar 2019 – Jun 2020 (1 yr 4 mo)*

- Researched and designed hybrid modeling with fluid mechanics using R and Python
- Developed the Python back-end engine for Hybrid Model Builder
- Back-end developer of Python libraries for Hybrid AI Builder
- Went to the 2020 East ODSC to engage with the data science community.

Researcher (Student)

*Rochester Institute of Technology, Rochester NY, Sep 2016 – Nov 2018 (2 yr 3 mo)*

- Presented vaccine research for the Bill & Melinda Gates Foundation at the 2017 INFORMS conference
- Modeled budget uncertainty in the global vaccine market using R and AMPL
- Developed a healthcare risk index of each country over time using machine learning in R
- Reviewed vaccine literature using natural language processing in R

Data Scientist (Intern)

*Geisinger Health, Danville PA, Jun 2017 – Aug 2017 (3 mo)*

- Modeled the likelihood of a patient not donating to the MyCode program using machine learning in R
- Modeled the distinguishing characteristics of bladder cancer patients using machine learning in R

Data Analyst (Intern)

*Geisinger Health, Danville PA, Jun 2016 – Aug 2016 (3 mo)*

- Made recommendations to executives of two neighboring hospitals on how to share the demand, based on analysis of personal health records and doctor schedules in R and Teradata

- Made recommendations to operations staff of a hospital on how to respond to changing occupancy rates, based on time series analysis of personal health records in Excel and Teradata.

#### Simulation Modeler (Student)

*Rochester Institute of Technology, Rochester NY, Nov 2015 – Mar 2016 (5 mo)*

- Developed a hierarchical discrete event simulation model of a manufacturing facility for the United States Department of Defense using Simio

#### Product Management Analyst (Intern)

*Mercury Systems, Chelmsford MA, Jun 2015 – Aug 2015 (3 mo)*

- Developed a system of Excel spreadsheets to automate the pricing of new products
- Developed a model for the price range of new products using machine learning in R

#### Continuous Improvement Engineer (Intern)

*JMA Wireless, Liverpool NY, Jun 2014 – Jan 2015 (8 mo)*

- Provided time series analysis of safety, quality, delivery, and cost for multiple manufacturing cells
- Ran time studies on multiple manufacturing cells; Designed and machined a system for line balancing the manufacturing cells; Developed an Excel spreadsheet for redesigning the line balancing system
- Measured the floor layouts of multiple manufacturing cells; Redesigning inventory and machine locations using AutoCAD and tape
- Ran repeatability and reproducibility analysis on multiple workstations using Excel and Minitab