Nicholas J Morris

DATA SCIENTIST NICHOLASJMORRIS93@GMAIL.COM (978) 476-3223 github.com/N-ickMorris

Professional Summary

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

To work for a job where my analytical ability can facilitate contemporary solutions. In this job, I will build optimization, machine learning, or statistical models with the combined knowledge of data, people, and literature to describe key patterns and anticipate desired information and goals.

For work and links to the work itself, click my name to be brought to my LinkedIn.

Key Strengths

- Machine Learning in Python and R.
- Discrete Event Simulation in Simio.
- Optimization in Python and AMPL.
- Monte Carlo Simulation with Design of Experiments in Python, R, and Excel.
- Back-end Programming in Python. Familiar with SQL and Bash.
- Statistical Analysis in Python and R: *Summarizations, Hypothesis Testing, Distribution Identification, Confidence Intervals, Quality Control, Visualizations, Data Cleansing, Covariation/Distances, Transformations, Non-Black-Box Modeling.*

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 Analytics Engineer

FacilityConneX, Nashua NH, Oct 2020 – Present (1 yr 6 mo +)

- Back-end developer for continuous performance and reliability monitoring.
- Developed real-time machine learning in Python for a data streaming platform.
- Developed real-time analytics in Python on a data streaming platform.
- Code conversions from C# to Python.
- Developed time series dashboards.

Data Scientist

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

- Researched and constructed hybrid machine learning with first principles using Python and R.
- Developed the Python back-end engine for Hybrid Model Builder.
- Back-end developer of Python libraries for Hybrid AI Builder.
- I went to the 2020 East Open Data Science Conference to engage with the community.

Researcher (Student)

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

- Presented vaccine research on global distribution optimization for the Bill & Melinda Gates Foundation at the 2017 INFORMS conference.
- Using R and AMPL, I modeled budget uncertainty in the global vaccine market.
- Using machine learning in R, I developed a healthcare risk index for each country over time.
- Reviewed vaccine literature using natural language processing in R.

Data Scientist (Intern)

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

- Using machine learning in R, I modeled the likelihood of a patient not donating to the MyCode program that genetically predicts illness and disease.
- Using machine learning in R, I modeled the distinguishing characteristics of bladder cancer patients.

Data Analyst (Intern)

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

- Using R and Teradata, I made recommendations to executives of two neighboring hospitals on how to share their demands based on an analysis of personal health records and doctor schedules.
- Using Excel and Teradata, I made recommendations to the hospital's operations staff on responding to changing occupancy levels based on a time series analysis of personal health records.

Simulation Modeler (Student)

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

- Using Simio, I developed a hierarchical discrete event simulation model of a manufacturing facility for the United States Department of Defense.

Product Management Analyst (Intern)

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

- I developed a system of Excel spreadsheets to automate the pricing of new products.
- Using machine learning in R, I created a model for the price range of new products.

Continuous Improvement Engineer (Intern)

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

- I provided a time series analysis of safety, quality, delivery, and cost for multiple manufacturing cells.
- I ran time studies on multiple manufacturing cells. Designed and machined a system for line balancing the manufacturing cells. And I developed an Excel spreadsheet for redesigning the line balancing system.
- I measured the floor layouts of multiple manufacturing cells: redesigned inventory and machine locations using AutoCAD and tape.
- I carried out a repeatability and reproducibility analysis on multiple workstations using Excel and Minitab.