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DATA SCIENTIST [NICHOLASJMORRIS93@GMAIL.COM](mailto: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, Optimization. Strong engineering professional with a Bachelor of Science and Master of Engineering in Industrial Engineering from Rochester Institute of Technology.

Searching for a job where my analytical skills can be a part of contemporary solutions. In this job, computer mathematical models would be built with knowledge from data, people, and literature to describe/predict key information.

# Key Strengths

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| --- | --- | --- |
| * Machine Learning in Python | * Optimization in Python | * Back-end Programming in Python |
| * Machine Learning in R | * Optimization in AMPL | * Excel: VLOOKUP, Macros, Pivot Table/Chart |
| * Familiar with SQL | * Familiar with Docker | * Design of Experiments |

# 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; Redesigned inventory and machine locations using AutoCAD and tape
* Ran repeatability and reproducibility analysis on multiple workstations using Excel and Minitab