Jacob O. Miller

1211 W 67th Street • Cleveland OH, 44102
(937) 266-4672 • jmiller.4038@gmail.com
[LinkedIn](#) • [GitHub](#)

Objective

Seasoned data scientist seeking opportunity to implement end to end technology solutions to challenging data and analytics problems.

Work Experience

- **IBM Watson Health,** Center for Applied Informatics   www.ibm.com/watson/health
  Director of Foundational Informatics   *2018 - Present*

  – Focused on improving the usability and quality of healthcare data in the Watson Health Cloud
  – Leading initiatives to integrate multiple IBM acquisitions into a single coherent platform strategy

  Team Lead Platform Innovation   *2017 - 2018*

  – Lead a team of 5 data scientists
  – Oversaw the development of new models, onboarding process improvement and SME customer support
  – Received "honey badger award" given to employees that go above and beyond normal duties

- **Explorys / IBM Watson Health,** Innovation Team   https://www.ibm.com/watson/health/explorys/
  Senior Data Scientist   *2012 - 2016*

  Probabilistic Person Matching
  Designed and implemented a best in class application for determining the identities of patients seen in healthcare data. The application is based upon a bayesian record linkage algorithm implemented in a Hadoop/Spark environment.

  – Runs over hundreds of millions of patients on a nightly basis
  – 4 patents filed, 1 granted to date
  – Finished in the top 10 of the ONC's patient matching challenge in 2017

  Risk Modeling Framework
  Designed and implemented a big data framework for implementing analytical models. The framework enabled our data scientists to easily build and deploy complex analytical models.

  – Generates billions of risk scores on a nightly basis
  – Built common routines to accelerate the implementation of new models
  – Implemented dozens of analytical models in this framework

  Claims Processing Pipeline
  Designed and implemented an end to end process for ingesting claims data into our platform. This process replaced a defunct one that left customers unhappy with inaccurate data and analytics.

  – Worked closely with customers to define requirements and success criteria
  – Designed the data model used throughout the platform and applications
  – Created automated ingestion routines and quality checks
  – Implemented hundreds of claims based analytics

Education

- **The Ohio State University**   **Columbus, OH**
  College of Engineering, M.S. Operations Research   *2010 – 2011*
  College of Engineering, B.S. Industrial and Systems Engineering   *2006 – 2010*

Interesting Things About Me

My primary mode of transportation is a bicycle. In my free time I'm an amateur guitar player, piano player, bartender and dog dad.