# Jacob O. Miller

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### **Objective**

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

## Work Experience

• IBM Watson Health, Data Science Innovations

www.ibm.com/watson/health

2018 - Present

Senior Data Scientist / Analytic Architect

- Focused on delivering AI/ML solutions in a variety of cloud based architectures
- Leading initiatives to streamline the end to end AI lifecycle for data scientists across the organization resulting in a reduction to delivery timeline from ~9 months to ~3 months
- Received Watson Health General Manager Award

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 Senior Data Scientist

https://www.ibm.com/watson/health/explorys/

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

College of Engineering, M.S. Operations Research

College of Engineering, B.S. Industrial and Systems Engineering

2006 – 2010

## **Interesting Things About Me**

I've been a bike commuter for the past 5 years. In my free time I'm an amateur bread baker, musician, bartender and dog dad.