

# VIGNESH KUMARESAN



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Curious data scientist with experience in applying statistical techniques to analyze healthcare data. Extensive background in machine learning programming, including predictive modeling, data mining, and natural language processing.

- Languages: Python, R, SQL, Hive, Spark, Tableau, SAS, SPSS
- Experience with applied analysis (pandas, numpy) and deep learning frameworks (TensorFlow, PyTorch)
- Courses and projects completed in data science methodology, including NLP, machine learning, and cloud computing
- Industry experience in open-ended problem-solving and data science lifecycle

## EDUCATION

### Duke University

Master in Interdisciplinary Data Science

May 2020

Durham, NC

### University of Miami

Bachelor of Science in Economics and Psychology, Minor in Biology

May 2016

Coral Gables, FL

## EXPERIENCE

### Aetna, a CVS Health Company

*Data Scientist*

5/20-Present

Wellesley, MA

- Identified business growth opportunities and pilot strategy for behavioral health offerings in CVS HealthHubs through cost savings analysis performed in Hive and Spark.
- Analyzed multiple data sources to inform targeted outreach and drive utilization of behavioral health service for Aetna/CVS employees.

### Verily Life Sciences (formerly Google Life Sciences)

*Health Informatics Intern*

5/19-8/19

Cambridge, MA

- Responsible for data engineering and production of clinical notes NLP pipeline in Python, creating the organizational capability to automatically extract clinical concepts from text and perform disease phenotyping and feature engineering for predictive models.
- Conducted time series analysis to observe patterns in prescription fill data from a large national pharmacy and built model features for prediction of medication adherence in patient population.

### IBM Watson Health

*Data Scientist, Emerging Analytics, Value Based Care*

8/16-7/18

Cambridge, MA

- Utilized large volumes of claims and EHR data to build predictive models for risk of readmission and risk of hospitalization.
- Explored social determinant data sources and tested various modeling techniques (including Random Forest and hierarchical modeling), sharing results with the rest of the organization to guide future modeling efforts.
- Performed ad-hoc analyses and created Tableau visualizations from EHR data for prospective life sciences clients.

### Duke Crucible

*Data Scientist*

8/19-5/20

Durham, NC

- Collaborated with engineers and product managers to build and test a Clinical Prediction Platform that will enable data scientists to deploy ML models across the Duke Health system.

## RELEVANT PROJECTS

**Master's Capstone:** Worked with Duke Surgery on various data science projects for use in the health system, including OR schedule optimization, heart transplant risk modeling, and implementation of a Learning Health Unit.

**Limitless Data:** Co-founded preventative maintenance analytics company as part of Mission Driven Startups course at Duke; currently continuing to work with Air Force.

## OTHER

LinkedIn: <https://www.linkedin.com/in/viggy-kumaresan/>

Github: <https://github.com/vkumaresan>

United States Citizen