VIGNESH KUMARESAN

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Curious data scientist with experience in applying statistical techniques to analyze healthcare data and extensive background in machine learning programming, including predictive modeling, data mining, and Natural Language Processing.

EDUCATION

Duke University — May 2020
Master in Interdisciplinary Data Science — Durham, NC

University of Miami — May 2016
Bachelor of Science in Economics and Psychology, Minor in Biology — Coral Gables, FL

EXPERIENCE

Verily Life Sciences (formerly Google Life Sciences) — 5/19-8/19
Health Informatics Intern — 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 — 8/16-7/18
Data Scientist, Emerging Analytics, Value Based Care — 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 — 8/19-Present
Data Scientist — Durham, NC

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

Duke's Fuqua School of Business — 01/19-Present
Graduate Teaching Assistant — Durham, NC

- Create and grade assignments in R, hold office hours for students in the Customer Relationship Management course taught by Dr. Matthew Manary.

TECHNICAL SKILLS

- Languages: Python, R, SQL, 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 data visualization
- Industry experience in data science lifecycle (data preparation, cleansing, modeling, analysis, and production)

RELEVANT PROJECTS

Master's Capstone: Currently working with Duke Surgery on various data science projects for use in the health system, including OR schedule optimization and heart transplant risk modeling.

Co-Author (paper in review): 'Applying Topic Modeling to the Analysis of Clinical Consultations: the Study of Patients with Low- and Intermediate-Risk Cancer.'

OTHER

LinkedIn: https://www.linkedin.com/in/viggy-kumaresan/
Github: https://github.com/vkumaresan
United States Citizen