Sean Cooke

(516) 413-1876
SeanCooke8892@gmail.com
LinkedIn | GiHub | Personal Website

Skills

- Machine Learning Engineer with 10 years of software engineering experience
- Experience working with
  - Programming Languages: Python (Jupyter, Pandas, scikit-learn, Matplotlib, pytest), JavaScript, PHP, Java
  - Databases: Snowflake, Oracle SQL, MySQL
  - Infrastructure: Linux, Bash, AWS, Git, Poetry, Docker, Kubernetes, Airflow, Tableau, Apache
  - Project Management: Agile Scrum, Kanban, Jira, Confluence
- Skilled in Machine Learning, Data Pipelines, Data Visualization, Algorithm Design, and Cloud Computing

Experience

athenahealth *Boston, MA*

Machine Learning Engineer   *June 2022-Present*

- Added clinical encounter summaries using using generative AI to let physicians know which patient documents are worth reading in-full
- Extended capability of Voice Assistant for providers to filter patient conditions by active/historical using Python and Kubernetes

Data Analyst   *March 2020-June 2022*

- Coauthored published research in top cardiology journal showing addition of Apple watch atrial fibrillation detection software did not increase AFib claims using Difference-in-Differences Estimation
- Showed doctors were 7x more likely to mark patient conditions as acute/chronic after swimlanes were added to patient chart by creating Tableau dashboard querying Snowflake tables in Airflow
- Committed Python package that updates multiple git repos simultaneously using JSON file and GitPython API. Encouraged DevOps best practices by ensuring all local code is up-to-date

Data Engineer   *May 2018-March 2020*

- Reduced daily extract failures from 677 to 5 in 1 month through Oracle SQL optimization by leveraging indexes and limiting cross-joins. Helps prevent EHR outages for hospitals by decreasing ETL job failures

University of Rochester Medical Center *Rochester, NY*

Software Engineer   *June 2014-April 2018*

- Architected, implemented, and supported urattendance.urmc.rochester.edu, an attendance tracking website for 1k medical residents and fellows using PHP; allowing physicians more time with patients by reducing admin time by 2 hours per meeting
- Wrote mobile-friendly STEP and SURF Applications using JavaScript

Independent Projects

titanic   www.github.com/SeanCooke/titanic

- Feature Engineering and XGBoost classifier achieves 86% accuracy on survival from Titanic Data Set

Tumor Classification   www.github.com/SeanCooke/tumor-classification

- Random forest classifier achieves 96% accuracy on diagnosis from Breast Cancer (Wisconsin) Data Set

Education

University of Rochester *Rochester, NY*   *August 2015-May 2017*

- Master of Science in Computer Science; GPA 3.46

SUNY Geneseo *Geneseo, NY*   *January 2011-May 2014*

- Bachelor of Arts in Mathematics, Minor in Computer Science