

Matthew Holden



DUKE UNIVERSITY | MASTER'S IN DATA SCIENCE

SEEKING: DATA SCIENCE INTERNSHIP SUMMER 2024

CONTACT

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EDUCATION

Masters in Data Science
Duke University
Expected Completion: Apr. 2025

Bachelors in Mechanical Engineering
University of Michigan
Completed: Apr. 2019

SKILLS

// LANGUAGES

Python, SQL, Rust, Spark, R

// TECH STACK

Azure - Blob Storage, Data Lake, Databricks, App Services
MySQL, SQLite
Automsoft RAPID DB (hierarchal)
GitHub, GitLab, CI/CD Pipelines
JIRA, Smartsheet, Slack, MS Teams

// ADDITIONAL SKILLS

Project Management
Public Speaking / Presenting
Collaborative Teammate
Self-Motivated / Goal Oriented

SUMMARY

Data science master's student with industry experience writing production-level data engineering and data analytics code (Python/SQL). Seeking internship opportunity to deliver optimized solutions using machine learning and statistical modeling. Proven project management skills, backed by a diverse portfolio, capable of collaborating with multidisciplinary groups from IT and software engineers to high level executives.

INDUSTRY EXPERIENCE

SENIOR SCADA SPECIALIST 2022 – 2023
Baxter Healthcare Inc. Round Lake, IL
SCADA (*Supervisory Control and Data Acquisition*)

- Designed and built **data pipeline** for high-frequency PLC data transfer between manufacturing equipment and SQL database.
- Designed and built an **anomaly detection** email notification system for critical temperature fluctuations during time-sensitive sterilization process.
- Developed **automated KPI visualizations** for upper management daily review of plant-wide performance.
- Utilized **RESTful APIs** for historical data extraction to support investigations of equipment failures.

SENIOR PROCESS ENGINEER 2021 – 2022
Baxter Healthcare Inc. Round Lake, IL

- Led IT and software engineering team** through agile development of a maintenance request ticketing system. Maintenance response times improved 62% six-months post-implementation.
- Defined product strategy, managed 500k budget, and presented business incentive to Baxter VPs and CEO.
- Atlassian Jira for daily project management and Gantt charts for executive level timelines.

MASTER'S DEGREE

NFL PLAYER TRACKING WEB APPLICATION (GitHub)
Data Engineering / Cloud Computing Course

- Developed NFL player tracking web application using **Azure SQL Database** and **Azure Databricks** for data processing, and **Docker Hub** and **Azure App Services** for deployment.
- Implemented **GitHub CI/CD** pipeline for efficient testing, linting, and deployment.

PREDICTING OSCAR NOMINEES (GitHub)
Natural Language Processing Course

- Designed competing predictive **machine learning models** for identifying Oscar nominees from movie reviews. Built **Naive Bayes model** and **Recurrent Neural Network** with Word2Vec embeddings.
- End-to-end execution including project scoping, data sourcing, data preprocessing, iterative model improvement, and final deliverable report.

OPIOID POLICY IMPACT (GitHub)
Applied Data Science Course

- Investigated the effectiveness of legislative policies implemented in Washington, Texas, and Florida to combat abuse of prescription opioids and opioid overdose deaths.
- Processed 100Gb of DEA ARCOS data using python Dask for chunking and wrote **logistic and linear regression models** for diff-in-diff analyses with python SciKit-Learn.