

Matthew McMonagle

190 Broadstone Dr, Mars PA 16046 | (724) 664-3344 | mmmcm1990@gmail.com |
<https://www.linkedin.com/in/mattmcmonagle/> | <https://github.com/mattmcmon>

SUMMARY

Results-driven software professional with 3 years of experience in data analytics and automation. Pursuing a Master's in IT at Carnegie Mellon University, specializing in Business Intelligence and Data Analytics. Proficient in Python, Java, and SQL, with experience in data modeling, ETL pipelines, and software development. Skilled in building scalable applications and collaborating with cross-functional teams. Seeking a Software Engineer role to apply analytical and development expertise in creating innovative solutions.

EDUCATION

Carnegie Mellon University, Pittsburgh, PA

Master of Information Technology: Business Intelligence and Data Analytics

May 2025

GPA 4.19/4.0

Coursework: Intro to Python, Software Design for Data Scientists, Data Warehousing, Data Focused Python, Unstructured Data Analytics, Linux and Open Source, Web Application Development, NoSQL Database Management, Object Oriented Programming in Java, Machine Learning with Tableau

Slippery Rock University of Pennsylvania, Slippery Rock, PA

Bachelor of Science in Business Administration

Dec 2013

GPA 3.425/4.0

Coursework: System Software & Architecture for the End User, Structured & Dynamic Web Programming, Discrete Computational Structures

Butler County Community College, Butler, PA

Transfer

May 2011

Coursework: Intro to Computer Programming, Object Oriented Programming, Programming in C++

SKILLS & TOOLS

Programming Languages: Python, SQL, Java, R, JavaScript, YAML, C++

Data Engineering Tools: ETL pipelines, dbt, DuckDB, Cassandra, MongoDB, Redis, Neo4j

Cloud & DevOps: Heroku, Linux

Software Development: Git, Flask, IntelliJ, Jupyter, Docker, Agile Methodologies

Functional: Data Warehousing, Automation, Data Modeling, Communication

ACADEMIC PROJECTS

FTC Case Search Application

Aug 2024 Dec 2024

- Developed a GUI-based Java application using object-oriented principles, enabling users to view, search, edit, add, and delete Federal Trade Commission cases. Implemented efficient data management and streamlined user interaction for enhanced functionality.

E-Books Web Application

May 2024 Jun 2024

- Designed an E-book web application using data analytics to enhance the front-end user experience

New York City Transit Data Warehouse

Oct 2023 – Dec 2023

- Designed and implemented a scalable data warehouse using **DuckDB**, **dbt**, **YAML**, and **Python**, integrating large-scale NYC transit data for real-time rideshare analysis.

Job Search Aggregator

Aug 2023 – Oct 2023

- Developed a Python application that leverages **BeautifulSoup** and **Selenium** to aggregate over 50,000 Data Science job postings and pertinent information to create a comprehensive job search tool.

Autonomous Vehicle Survey Web Application

May 2023 – Jun 2023

- Deployed a **Python** web application with **Heroku** that implemented logistic regression to predict (with more than 90% accuracy) whether a user would take an Autonomous taxi ride based on survey responses.

Video Game Recommendation Chatbot

Aug 2022 – Oct 2022

- Created a video game chatbot using **scikit-learn** in **Python** that will recommend a PC game to play based on a favorite game that is provided by the user.

WORK EXPERIENCE

Carnegie Mellon University – Computer Science Department

Pittsburgh, PA

Administrative Assistant II

Oct 2021- Present

- Gather and analyze data for School of Computer Science to discern staff onboarding experience, which is utilized by the Dean's Office to improve staff retention.
- Automate tasks for 7 faculty members, optimizing course budgeting and grading procedures using Excel/Google Sheets, reducing manual workload by 50%.

ABARTA Coca-Cola Beverages

Pittsburgh, PA

Product Supply Planner

Jun 2021 - Oct 2021

- Utilized SAP software to monitor warehouse inventories and generate product orders.
- Optimized inventory management processes using Excel and SAP, reducing stockouts by 10%.

Key Account Coordinator

Feb 2018 - Jun 2021

- Forecasted sales volume at grocery chains and maintained a 90% or higher on in stock items.
- Developed Excel dashboards for inventory forecasting, improving supply chain accuracy by 15%.
- Collaborated with developers to enhance forecasting tools based on user feedback.

Account Manager

Feb 2015 - Feb 2018

Merchandiser

Feb 2014 - Feb 2015