

JACKSON MAYFIELD

Aspiring Software Developer | Data Analyst II
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SUMMARY

Aspiring software engineer with a strong foundation in data analysis and problem-solving. Experienced in building data-driven solutions using Python, R, and SQL, with growing expertise in software development principles, including object-oriented programming, data structures & algorithms, and cloud infrastructure. Skilled at collaborating on cross-functional teams to develop and deploy applications that improve operational efficiency and decision-making. Looking to leverage a data-driven background to contribute to innovative software solutions.

SKILLS

- **Languages:** Python, R, SQL, JavaScript, C++
 - **Software Development:** OOP, REST APIs, Version Control (Git), Unit Testing
 - **Web Development:** HTML, CSS, Django, React
 - **Data Manipulation:** pandas, tidyverse
 - **Database Management:** Big Query, PostgreSQL, Teradata
 - **Cloud & DevOps:** GCP, GitHub, CLI, ssh, AWS
 - **Tools & Platforms:** Git, JIRA, VS Code, PlatformIO, Tableau, Power BI
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PROJECTS

Soil Moisture Sensor Monitoring System

Personal Project | October 2024

- Developed a monitoring system using an Arduino and ESP8266 to collect and transmit real-time soil moisture data over home network to a Django web application.
- Integrated sensor data with a web-based interface to display readings and monitor plant health remotely.

Drug Discovery Application

Nashville Software School | May 2023

- Built an interactive R Shiny web application that analyzed bioinformatics data to identify potential drug therapies.
- Implemented machine learning algorithms to predict molecular properties and visualize data, streamlining research analysis for drug discovery.

GPU Resource Optimization Analysis

Vanderbilt ACCRE | March 2023

- Analyzed memory usage patterns of GPU hardware using Python to optimize computational resources.
 - Improved resource allocation, leading to a more efficient system based on runtime data from GPU tasks.
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PROFESSIONAL EXPERIENCE

Data Analyst II

HCA Healthcare | April 2023 – Present

- Led analysis and reporting on patient safety metrics for the Clinical Operations Group.
- Created data-driven dashboards and metrics for 186 hospitals, influencing the implementation of safety practices.

Data Science Apprentice

Nashville Software School | September 2022 – June 2023

- Designed and implemented solutions for data collection, analysis, and visualization.
- Developed machine learning models and automated data pipelines to support various projects, including geospatial and natural language processing tasks.

Research Assistant

Vanderbilt University Medical Center | July 2021 – April 2023

- Conducted data analysis on neurophysiological data for auditory research, using MATLAB for custom analysis.
 - Assisted in developing psychometric experiments and co-authored journal publications.
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EDUCATION

Data Science Training Certificate

Nashville Software School | June 2023

Bachelor of Science in Biomedical Engineering

University of Tennessee, Knoxville | May 2021