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

Python, R, SQL, JavaScript, C++, MATLAB, Object-Oriented Programming (OOP), Git, HTML, CSS, Django, pandas, tidyverse, Big Query, PostgreSQL, Teradata, Google Cloud Platform (GCP), GitHub, Command Line Interface (CLI), SSH, JIRA, Visual Studio Code (VS Code), PlatformIO, Tableau, Power BI

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.

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.

EDUCATION

Data Science Training Certificate

Nashville Software School | June 2023

Bachelor of Science in Biomedical Engineering

University of Tennessee, Knoxville | May 2021