Joseph Coker

118 Green Glades
Ridgeland, MS 39157

jpcoker3@gmail.com   601-966-6245 | www.linkedin.com/in/jpcoker

EDUCATION

Mississippi State University – Bagley College of Engineering   **Starkville, MS**
Bachelor of Science in Computer Engineering   *May 2024*
- Cumulative GPA: (3.6/4.0)
- Shackouls Honors College Scholar

Mississippi State University – Bagley College of Engineering   **Starkville, MS**
Master of Science in Computer Engineering   *December 2024*

WORK EXPERIENCE

USACE – Vicksburg Branch – GIS   **Vicksburg, MS**
Engineering Technician   *June 2023 - Present*
- Utilized machine learning to create a process for identifying damaged houses via drone.
- Monitored over 30 Dams and Levees through generating web scraping scripts.
- Wrote scripts to automate common processes such as quarterly updates of maps spanning various departments.

Mississippi State University   **Starkville, MS**
Research Assistant   *March 2022 – August 2022*
- Collected texture and spectra data of various foods to train a machine learning algorithm to sort foods according to their quality and identify any defects or abnormalities.
- Constructed specialized hardware from the ground up to collect volumetric data of sweet potatoes to train a machine learning algorithm to detect abnormalities on the skin of sweet potatoes.
- Built a black box for hyperspectral data collection. Collected data from various foods to detect quality and defects.

Freight Waves   **Chattanooga, TN**
Software Development Intern   *January 2020 – March 2020*
- Self-taught web scraping with Python and scraped data from multiple truck reseller websites to create a database of trucks that could be easily combed through to find what the clients needed.
- After successfully implementing the web scraping script, expanded the program to cover more products.
- Final database was comprised of over 50,000 entries and imported into an easily readable Excel format that was integrated into proprietary software

Projects

Media Automation Server   *August 2020- Present*
Administrator
- Unraid (Linux based) server for media compression and customization.
- Created YAML files for Plex Meta Manager API integration for poster automation and seasonal collections.
- Utilized Docker and GitHub to pull and customize operations for common processes.
- Over 99% uptime over 18 TB array with data redundancy.

ADDITIONAL INFORMATION & SKILLSETS

Hardware: Raspberry Pi, Arduino, FPGAs, Microcontrollers, Computer Architecture
Software: VSCode, Anaconda, GitHub, Docker, MATLAB, Xilinx Vivado, Quartus, Fusion 360, OrCAD, ARCGIS
Programming Languages: Python, C/C++, Assembly, Verilog/System Verilog, CSS/HTML
Awards & Recognitions: MSU Academic Excellence Scholarship Recipient, MSU Design Award, Hanes Growth to Potential Award, Eagle Scout
Interests: Personal Server Management, Car Enthusiast, Culinary Arts