Lou Vaughn

loujvaughn@gmail.com | linkedin.com/in/lou-vaughn | loujvaughn.com

EDUCATION

University of Central Florida Orlando, Florida

M.S. Data Analytics, 2024 – Ongoing Cumulative GPA: 3.938/4

Florida Gulf Coast University Fort Myers, Florida

B.S. Software Engineering, 2019 – 2023 Cumulative GPA: 3.742/4

Honors: Graduated magna cum laude, Dean's List for 6 semesters

EXPERIENCE

Freelance Developer November 2023 – Current

Various Clients - Remote

- Optimized data pipeline processing **50,000 + products** for seamless integration into a Shopify store, automating tasks such as categorization from **2000 + tags**, and Shopify formatting.
- Performed unsupervised learning on behavior and demographical data gathered from Google Analytics to segment customers and guide targeted marketing strategies.
- Delivered interactive reports with Plotly to communicate key insights from market analysis.
- Developed forecasting models to predict product demand, aiding inventory decisions.

Android Development Intern for Wave Browser June 2023 – September 2023

Eightpoint (formerly Spigot Inc.) - Fort Myers, Florida

- Led android development to modify and rebrand the open-source browser Chromium into a mobile port of the Wave Browser app on desktop.
- Conducted extensive research into the Chromium Project, one of the largest open-source repositories on GitHub, to identify areas of interest for development.
- Implemented a JNI bridge to access resources and code used in the desktop application.
- Diagnosed and resolved **18 critical bugs** to ensure seamless integration between git repositories.

PERSONAL PROJECTS

TUMOR DETECTION AND CLASSIFICATION UTILIZING VIT

- **Fine-tuned a Vision Transformer model for Brain Tumor Detection** and Classification in MRI scan images, **achieving 80% test accuracy** on a medical imaging dataset.
- Applied **progressive unfreezing** during training to gradually fine-tune deeper layers of the Vision Transformer, **improving model stability and performance on limited labeled data.**
- Utilized: Python, Hugging Face, PyTorch, CUDA

GLOBAL FOOD WEB – TRADE NETWORK ANALYSIS

- Analyzed the global food map of 17,000+ international trade routes spanning 226 countries.
- Applied community detection methods to identify clusters and patterns in trade relationships.
- Evaluated the robustness and resilience of the global food web under simulated disruptions.

SKILLS

Programming: Python, R, SQL, C++, HTML, CSS, JavaScript, Java, React, Tailwind, HTML, CSS

Libraries: PyTorch, NumPy, OpenCV, Matplotlib

Tools & Apps: Microsoft Excel, Microsoft PowerPoint, Microsoft Suite, Adobe Suite, Blender