# **Laurence Mullen**

#### **Education**

## **Bachelor of Science in Computer Science**

August 2018 - May 2022

Gainesville, FL

University of Florida

• Environmental Science Minor

• GPA: 3.77/4.0, Graduated Cum Laude

## **Professional Experience**

## **Contract Full Stack Developer**

September 2022 – Present

Worth Avenue Yachts

Fort Lauderdale, FL

- Developed a CRM system designed to optimize and assist yacht charter brokerage operations
- Proposed, designed, and implemented a full-stack web application using React.js, Flask, HTML/CSS, and SQL
- Implemented features to help manage client inquiries, optimize daily workflow, and assist with data analysis
- Doubled charter broker productivity and improved charter client retention by 40%

## **Undergraduate Research Assistant**

January 2022 - May 2022

UF Biomechanics, Robotics, and Imaging in Orthopedics Lab

Gainesville, FL

- Aided development of a program for Automated Model-Image Registration of Joint Kinematics using ML
- Wrote performant code in C++ and Python; utilized Qt, VTK, OpenCV, cuDNN, and libtorch toolkits
- Replaced an inefficient exponential-time algorithm using linear algebra concepts, reducing runtime by 98.5%
- Led sprints for a team of six and created high-quality UML diagrams, documentation, and presentations

## **Junior Web Developer**

April 2021 - Present

Albion International Inc.

Fort Lauderdale, FL

- Developed and maintained websites for clients in the yachting industry using HTML, CSS, and JavaScript
- Communicated frequently with clients to ensure that requirements and features were designed to satisfaction
- Resolved security breach and implemented automated security tasks, saving the company over \$5000/month

#### **Technical Skills**

Languages: Python, C++, C, Java, JavaScript, HTML/CSS, SQL, Julia, R, Rust, MatLab, Bash

Frameworks & Libraries: React.js, Express.js, Flask, Qt, NumPy, SciPy, Scikit-learn

Tools: Git, Node.js, MongoDB, Docker, Ansible, Linux, WSL, Nginx, Postman, CMake, Visual Studio

## **Projects**

Homelab 2018 - Present

DevOps Experimentation Server - Ansible, Docker, Linux, Bash

- Used Ansible to automatically set up environments and Docker to deploy 30+ containerized applications
- · Created reverse-proxied network using Nginx, SSL/DNS with Cloudflare, and remotely linked storage with Gsuite
- Host websites, game servers, media, and more while ensuring optimal uptime and performance for 15 users

## AlgoRythm

Audio Visualizer - Python

- Created a customizable real-time audio visualizer that dynamically changes based on the song and cover art
- Built using the PyGame GUI framework and PyAudio, NumPy, and SciPy for performant data processing
- Implemented Windows media and Spotify API integration, as well as various GUI elements
- Improved performance by 20% and enhanced code readability using polymorphic OOP concepts

#### **Activist Agenda**

Social Media Site for Political Movements - React, Node.js, and MongoDB

- Developed a web application on the MERN stack in support of political activism and organized movements
- Responsible for frontend components, integrating email and geocoding APIs, and Heroku deployment
- Utilized Agile development methodology to increase team productivity while maximizing client satisfaction