Lander Wells

WORK EXPERIENCE

Leidos - Air Traffic Control Systems **May 2024 - Present**

Software Developer: C++, QT, Java, Python, PostgreSQL *Eagan, MN*

- Automated Terminal Proximity Alert (ATPA): Designed and implemented PostgreSQL schemas to store configurable wake turbulence parameters for aircrafts and ATPA regions for runways to enable real-time proximity alerts in SkyLine-X. Implemented a geospatial algorithm to generate regions based on pre-existing runway coordinates and size parameters.
- Designed PostgreSQL schemas to define geographic regions and their associated controllers, enabling tailored data reduction for low-bandwidth environments. Developed a Java-based front-end interface for configuration input, and implemented Python scripts to extract and structure the data for integration into downstream applications.

Software Developer Intern: C++ **June 2023 - August 2023**

- Resolved complex C++ bugs in the FAA's ERAM system using GDB; automated legacy test cases by converting manual formats to structured XML, reducing test time by 90% and improving reliability.

Lakeville South Strength Program **June 2021 - August 2022**

Assistant Strength Coach *Lakeville, MN*

- Coached over 500 athletes (ages 9–18) daily, adapting instruction styles to diverse experience levels and learning speeds fostering strong communication and mentorship abilities.
- Delivered one-on-one technical guidance as needed on lifting mechanics, developing patience, problem-solving, and performance feedback skills transferable to peer code review and team collaboration.

EDUCATION

Northern Michigan University **August 2020 - May 2024**

BS: Computer Science, Minors: Electronics and Mathematics *Marquette, MI*

- 3.85 GPA (4.0 in major GPA)
- Olympic Weightlifting Athlete at National Training Site; represented Team USA at two IWF Junior World Championships

PROJECTS

iOS Bird Database App

Technologies Used: Swift, SQLite, UIKit

- Developed an iOS application providing a comprehensive database of birds, featuring functionalities for creating, updating, and deleting entries.
- Implemented user-friendly interfaces for data interaction using tabs and ensured efficient data management through SQLite.

Rustify (Spotify Clone in Rust)

Technologies Used: Rust, Rodio, Serde, Eframe/Egui

- Built a cross-platform desktop music player in pure Rust, using Serde for data serialization and Egui for a responsive GUI.
- Implemented advanced concurrency and multithreading techniques such as MPSC (Multi-Producer-Single-Consumer) to manage message sending between threads.