ETHAN DEAN

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PROFESSIONAL SUMMARY

I am an advancing C++ systems developer and have built desktop and web applications at the enterprise level. My experience building robust, containerized software applies widely and I have joined financial systems research to work on machine learning. My goal is to constantly expand my knowledge to improve the quality of my software.

EXPERIENCE

Software Engineer Intern

May 2024 – Present

Lockheed Martin - Hold secret-level security clearance

Orlando, FL

- IRAD Advanced Algorithms optimization of C++ code decreasing runtime by 20%
- Translation of **3** MatLab algorithms to **C++** code for use in embedded system
- Coordinated and led **2 week** procedure for **certification** of production line software

Software Engineer CWEP

Jun 2023 - May 2024

Lockheed Martin

Orlando, FL

- Designed and integrated 6 different built-in tests in C for embedded flight code used in production release
- Implemented 5 high-priority features for C++ GUI application used for simulations with embedded code
- Consolidated 9 features from an unsupported app to a C# GUI app, streamlining production workflow
- Created app with 8 custom defined UART messages on a python GUI application to poll hardware

Data Acquisition Team

Aug 2022 - May 2023

University of Central Florida

Orlando, FL

- Worked as a small team to create **60hz** onboard telemetry communication on a Rasp. Pi for a racing vehicle
- Developed the **python** script to read and process **4** streams of telemetry data from the vehicle

PROJECTS

Cruise Connect | Javascript, React, Node, Express, MySQL, Docker, Clerk

Apr 2024 – Present

- Developed personal project social media web app to help people meet before their cruise departs
- Engineered Docker-based containerization of the application, enabling seamless AWS deployment and cutting development cycle time by 50%, while enhancing scalability and reliability of the system
- Integrated Clerk API for user authentication, utilizing OAuth to streamline secure login processes
- Use MySQL database to store user and cruise data for comparing user interests

Board Testbench App | Python, PyQt, PySerial

Aug 2023 - Oct 2023

- Design and deployment of cross-platform app that polls boards with UART commands using PySerial
- Implemented multi-threading for performance optimization by managing write/read threads being queued for the port adding responsiveness to the app

Accelerometer Telemetry Processor | *Python, PySerial, Raspberry Pi*

Feb 2023 – Apr 2023

- Created script to process accelerometer data from four arduinos for real-time data visualization and logging
- · Learned PySerial library in order to read raw data and output processed data to the WiFi transmitter

EDUCATION

University of Central Florida

Aug 2022 – May 2026

Bachelor of Science in Computer Science, Minor in FinTech

Orlando, FL

- GPA: 3.987; SAT 1500/1600; ACT 34/36; Dean's List 2022-2024
- National Merit Scholar and UCF Burnett Honors Scholar
- CS Courses: Data Structures and Algorithms, Computer Arch., Enterprise Computing, Mobile SW
- Math Courses: Calculus I, II, & III, Differential Equations, Matrices and Linear Algebra, Physics 1 & 2
- Finance Courses: Corporate Finance, Financial Derivatives, Foundations in Financial Tech

TECHNICAL SKILLS

Languages: HTML | CSS | JavaScript | SQL | VBA | Shell | C | C++ | Python | C# | Java | JavaScript | MatLab **Frameworks/Libraries**: React | Node | Express | Next | Vite | MySQL | Tailwind | Django | Flask | C++ MFC | Qt | PyQt **Tools**: Git | Jira | VS Code | Visual Studio Pro | Eclipse | Unix/Linux | Docker | VxWorks