Andrew Kelton

B.S. Computer Science | Orlando, FL
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EXPERIENCE

Urban Sky — May 2025 - August 2025

AI Systems Intern — *Denver, CO*

- Led end-to-end delivery of a production multi-agent AI assistant integrated with the company's MRP system, from requirements and design through deployment and maintenance, serving over 50 users across 3 departments.
- Partnered with Manufacturing, R&D and Finance stakeholders to gather requirements, prioritize features, and iterate on user feedback as each team's technical point of contact.
- Built capabilities to answer manufacturing, R&D, and financial data questions and generate charts, graphs, and CSV exports on request, reducing manual report time by days.
- Provisioned and deployed cloud infrastructure on AWS using Terraform, Docker, and Conda, owning the full software development lifecycle.
- Presented system architecture, capabilities, and business use cases to technical stakeholders and non-technical end users.

EDUCATION

University of Central Florida — December 2026

B.S. Computer Science | GPA: 3.7 — *Orlando, FL*

Relevant Courses: Algorithms for Machine Learning, Project-Oriented Software Development, Computer Architecture, AI/ML, Parallel & Distributed Processing, Systems Software, Security in Computing, Statistical Methods

PROJECTS

Multithreaded Load Balancer & HTTP Server | *C++* — October 2026 – Present

- Developed a load balancer and backend HTTP servers from scratch in C++ using POSIX sockets and TCP distributing client requests across multiple servers.
- Designed non-blocking concurrent request handling to serve multiple client connections simultaneously.
- Implemented periodic synchronized health checks to detect unavailable servers and route requests to healthy instances.

Lee County Sheriff Interactive Map | *React, JavaScript, Python, SQL* — May 2026 - Present

- Developed an interactive web application that visualizes Lee County Sheriff's Office Activity using public API data and location-based filtering.
- Applied statistical analyses to identify trends and patterns in incident frequency, locations, and classifications, providing data-driven insights into police activity.
- Designed interactive maps, filters, and data visualizations to enable users to explore police activity by locations, incident type, and time.
- Will present project findings and demonstrate the application as part of UCF's Senior Design program.

A Parallel TF-IDF Implementation in C++ | *C++, Bash, Python* — January 2025 - April 2025

- Designed and implemented a multithreaded text classifier using TF-IDF scores and cosine similarity, with sequential and parallel versions to measure speedup, accuracy, and precision.
- Automated testing and benchmark comparison with Makefile, Bash, and Python scripts.
- Reported findings in an IEEE report and presented results for Concepts of Parallel and Distributed Processing.

MLB Game Predictor | *Python, C, JavaScript, SQL* — August 2024 - January 2025

- Developed a Flask and React web application with a C decision-tree model and SQL database, predicting game outcomes with 70-80% accuracy.
- Integrated MLB and X (Twitter) APIs to automate data collection and publishing of results.

SKILLS

Programming Languages: Python, C, C++, Java, JavaScript, TypeScript, SQL, Bash

Frameworks: React, Flask, scikit-learn, CrewAI

Knowledge: Full software development lifecycle, REST APIs, database management, systems programming, system design, multithreading/concurrency, data analysis, machine learning, scrum