

Aiden Letourneau

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EDUCATION

University of Central Florida

Orlando, FL

Bachelor of Science in Computer Science, Minor in Data Science - GPA: 3.9

Exp. May 2027

- **Courses:** Data Structures and Algorithms, Object-Oriented Programming, Computer Logic and Architecture, Discrete Math, Algorithms for Machine Learning, Systems Software, Computer Architecture.

EXPERIENCE

Software Developer Intern | Toptech Systems

May - Aug. 2025

- Engineered a new backend PHP-based reporting architecture into the company's existing web UI to ensure seamless data flow and awq consistent user experience.
- Achieved a 95% reduction in report generation time by using highly optimized data pipelines and SQL queries.
- Developed, tested, and deployed reporting solutions within a Red Hat Enterprise Linux environment, utilizing command-line tools and Bash scripting to manage server processes and automate workflows.
- Gained proficiency in the software development lifecycle by actively participating in CI/CD pipeline discussions, contributing to code reviews, and adapting to iterative feedback loops, ensuring faster deployment of high-quality reports.

Backend Software Engineering Intern | City of Orlando, Korean Culture Center

May - Sep. 2025

- Developed the core backend infrastructure for a new community portal for the Orlando Korean Culture Center, designed to increase event participation and streamline online donations.
- Engineered a secure and scalable RESTful API using Node.js, Express, and the Prisma ORM to power all frontend features and manage data interactions with a PostgreSQL database.
- Implemented a robust payment processing system by integrating the Stripe API, enabling secure online transactions for event ticketing and cultural center donations.
- Collaborated directly with OKCC staff to integrate new features, iteratively refining the website based on their feedback.

PROJECTS

StrideAI - GemiKnights 2025 | *Flutter, FastAPI, Supabase*

June 2025

- Developed a full-stack mobile application that analyzes a runner's form by processing user-submitted videos with computer vision models and statistical analysis.
- Engineered a Python backend using FastAPI to create API endpoints for video uploads and to orchestrate the analysis pipeline, feeding processed data into a Large Language Model (LLM).
- Utilized Supabase and its underlying PostgreSQL database to manage user authentication, secure video file storage, and persist the results of the running form analysis.
- Built a cross-platform mobile interface with Flutter to capture video uploads and display personalized, natural language feedback generated by the LLM to the user.

Meddy - Shellhacks 2024 | *Next.js, MongoDB Atlas*

Oct. 2024

- Developed, in a team of 4, a full-stack healthcare communications app using Next.js for both front-end and back-end capabilities, with MongoDB for patient and provider data storage.
- Designed and implemented data models with Mongoose to streamline CRUD operations, ensuring efficient and secure management of patient and provider information within MongoDB.
- Integrated the OpenAI API to generate health reports and suggest prescriptions based on patient data and the FDA's drug API to access real-time drug information, including generic and brand names.

TECHNICAL SKILLS

Languages: C, Java, Python, PHP, JavaScript, HTML, CSS, XML, JSON, SQL

Frameworks: FastAPI, Node.js, Express, Bootstrap, React, Next.js, Tailwind CSS

Developer Tools: Git, GitHub, NPM, Postman, AWS, VSCode, Scrum, Agile, SDLC, Perforce, Linux, RHEL, Windows

Libraries: jQuery, DOM, EJS, JSX, pandas, NumPy, mediapipe, cv2, PyTorch