

SEAN PREVITY

seanprevity@gmail.com • (813)-763-8442 • seanprevity.com • Orlando, Florida

EDUCATION

University of Central Florida, Computer Science, Bachelors of Science

2021 — Present

- Member of the Hack@UCF Collegiate Cyber Defense Club
- GPA: 3.62

PROJECTS

Pegaus Parking Website

- MERN application (MongoDB, Express.js, React, Node.js) for university parking coordination.
- Deployed the website to AWS with HTTPS encryption via Let's Encrypt.
- Built a modular Express.js backend using Mongoose for scalable data modeling and API structure.
- Integrated Google Maps APIs, including Routes API, to calculate real-time directions and distances.
- Utilized GitHub for development.

France Travel Guide Website

- Full-stack app using React (Context API, hooks) and Flask (Blueprints, SQLAlchemy).
- Populated and enhanced a 37,000-row PostgreSQL 'towns' table by importing INSEE shapefiles and adding coordinates for each commune.
- Utilized the OpenAI API for town descriptions and Wikipedia MediaWiki API for photos.
- Integrated an interactive Map feature through Google Maps API.
- Bilingual language UI support (French and English) using React Context.
- Cached AI descriptions in a table (with automatic invalidation on errors) to cut API calls and latency.

Premiere League Stats Tracker

- Full-stack website that displays stats for matches and teams in the English Premiere League.
- Built with Next.js, Fast API, and a PostgreSQL database on Supabase.
- Automatic statistics updates through a script and cronjob, ensuring the site's data stays current without manual intervention
- Implements PostgreSQL conflict resolution logic to upsert match, odds, and statistics data.

University Event Manager

- Event management platform using React, Node.js, and Express.
- Designed and implemented RESTful APIs with Express.js and JWT-based authentication.
- Utilized MySQL as the relational database to manage users, events, RSOs, and comments.
- Implemented role-based access control (RBAC) to differentiate event visibility based on RSO membership and university affiliation.

SKILLS

- **Programming Languages:** Java, Python, JavaScript, TypeScript, HTML, CSS, SQL
- **Frameworks & Libraries:** React (Hooks, Context API), Node.js, Express.js, Flask (Blueprints), FastAPI, Mongoose, SQLAlchemy
- **Databases:** PostgreSQL, MySQL, MongoDB, Supabase
- **Tools & Technologies:** Docker, Git, GitHub, AWS, Postman/SwaggerHub, RESTful API Design
- **Technical Skills:** Data Structures and Algorithms, Object-Oriented Programming, Software Architecture Design
- **AI/ML:** Strong understanding of machine learning concepts, Hugging Face Transformers, prompt engineering, API integration