

Nathan West

imnathanwest@gmail.com | 727-459-5304 | [GitHub](#) | [LinkedIn](#)

EDUCATION

University of South Florida

Bachelor of Science (B.S.) in Computer Science

May 2021 – May 2025

Coursework: Data Structures & Algorithms, Operating Systems, Software Engineering, Intro to AI, Secure Coding, Database Systems

EXPERIENCE

Bell Automation Systems

September 2024 – Present

Software Engineer Intern

Remote

- Reduced API response times by 35% by optimizing query logic and implementing caching across 50+ Express.js endpoints handling real-time weather data.
- Improved user satisfaction by 70% by redesigning React/CSS components for StormAlert's dashboard.
- Increased coverage by 150% by integrating three new Mapbox geolocation data sources, extending support from Arizona to Texas and serving 10K+ additional users.
- Accelerated deployment by collaborating with QA and DevOps teams to automate testing and CI/CD workflows.

CodeWizardsHQ

May 2024 – Present

Programming Instructor

Remote

- Taught and mentored 200+ students in Python, Java, and web development, emphasizing proper practices.
- Designed projects and exercises, mirroring professional workflows, maintaining a 90% student retention rate.
- Led small-group capstone projects simulating real-world development teams, guiding students through Agile workflows.

PROJECTS

FridgeIQ | Swift, SwiftUI, OpenAI API, Firebase

- Developing an iOS application for food management, generating personalized meal suggestions using OpenAI's GPT AI, based on users' current fridge inventory.
- Built intuitive SwiftUI interfaces for adding, editing, and tracking available ingredients in real-time, enhancing accessibility.
- Implemented Firebase integration for user authentication and cloud-based food storage, syncing data across devices.
- Currently implementing machine learning-based receipt analysis, enabling automatic food recognition from images.

TripWise | Ruby (Rails), PostgreSQL, JavaScript, React, Google Maps API, OpenAI API

- Built a full-stack AI-powered trip planner that generates personalized itineraries, budgets, and location ideas.
- Developed a scalable Rails API backend with PostgreSQL for user authentication and trip data management.
- Enhanced location and route accuracy by integrating Google Maps API for distance, travel time, and costs.
- Improved usability and responsiveness by designing React front-end components with modular architecture.

Stampede | Ruby (Rails), PostgreSQL, JavaScript, Bootstrap, Git

- Led a 4-member Agile team to design and deploy a full-stack campus marketplace in Rails, enabling peer-to-peer item exchanges and achieving 50% adoption among the student body at peak usage.
- Integrated APIs with Rails and PostgreSQL to handle secure user authentication, listings, and transactions.
- Enhanced cross-platform usability by developing responsive JavaScript/Bootstrap front-end components.
- Streamlined collaboration and release cycles by implementing Git workflows and Agile sprints, improving feature delivery.

LEADERSHIP EXPERIENCE

RoboBulls | University of South Florida

August 2023 - August 2024

- Led a 5-member developer team to design and program an autonomous navigation robot.
- Integrated LIDAR sensors to enable real-time mapping and optimized obstacle detection accuracy by 50%.
- Collaborated with the hardware team to calibrate embedded systems to refine sensor feedback loops, improving stability.

SKILLS

- Languages:** C, C++, C#, Python, Java, JavaScript, Ruby, SQL, Swift
- Frameworks & Tools:** React, Node.js, Express.js, Ruby on Rails, Firebase, PostgreSQL, MySQL, Git, Figma