

Education

COMPUTER SCIENCE (B.S.)

University of Central Florida. GPA 4.00.

Summa Cum Laude. Top Honor Graduate (Tied for #1 out of 166 students).

Relevant Coursework: Senior Design, Discrete Structures, OOP, Systems Software, Operating Systems, Cyber Defense.

Orlando, FL
December 2023

INDUSTRIAL ENGINEERING (B.S.)

University of Central Florida. GPA 4.00.

Summa Cum Laude. Top Honor Graduate (Tied #1 out of 127 students).

Relevant Coursework: Senior Design, Operations Research, Systems Engineering, Quality Engineering, Empirical Methods.

Orlando, FL
May 2022

Experience



FULL STACK SOFTWARE ENGINEER

United States Army Reserve

Orlando, FL (Hybrid)
January 2023 – December 2023

- Coordinated with a team of 13 developers and 4 project managers to develop a unified mobile (Swift/Gradle) and web application using GitHub, React frontend, and an AWS backend for thousands of soldiers.
- Designed Figma models for a User Interface that incorporates a role-based permissions logic, empowering privileged users to manage CRUD operations on soldiers, units, budgets, and medical PHI.
- Migrated production data comprising thousands of data points from Firebase Cloud Storage to AWS RDS for PostgreSQL and optimized over 200 backend endpoints using Python 3 in AWS Lambda.
- Deployed user audit logs using JSON within AWS S3 buckets to track critical operations such as user deletions and displayed the logged data in a user-friendly, formatted table on the frontend.
- Established CI/CD pipelines using AWS SAM, CDK, Docker, and Git for seamless integration and testing, resulting in a 23% reduction in deployment times and frequency.
- Implemented push notifications for iOS/Android mobile devices using Firebase Cloud Messaging and AWS SNS.
- Employed Agile methodology with bi-weekly Jira sprints and maintained Confluence developer documentation.



PROCESS ENGINEER

Regal Boats

Orlando, FL
January 2022 – May 2022

- Implemented Six Sigma principles, leveraging Excel, Minitab, and Python scripts for analysis and optimization of manufacturing takt times, increased operational efficiency by 12% and reduced costs by 8%.
- Constructed Simio Simulation models and analyzed work-in-progress (WIP), throughput, cycle times, and utilization rates to design cost-effective manufacturing layouts and ergonomic workstations.
- Spearheaded the implementation of Lean methodologies, including 5S, to enhance work areas and layouts, minimizing awkward positions, repetitive motions, and inefficient operations.
- Detected deviations from established manufacturing standards and best practices by analyzing special causes of variation and ensured maintenance of ISO 9001 requirements through Standard Operating Procedures (SOPs).



QUANTITATIVE ANALYTICS INTERN

U.S. Department of Homeland Security

Remote
June 2021 – July 2021

- Collaborated closely with technology and operations experts to design resilient TSA airport checkpoint systems, resulting in a 15% decrease in wait times.
- Conducted data analysis on over 1000 data points using Excel, leveraging pivot tables, statistical models, power query, and power pivot to derive insights and optimize processes.
- Developed Arena and Simio simulation models to assess queueing times, employing queueing theory principles to evaluate bottlenecks, queue length, agent utilization rates, wait times, and service times.



SUPPLEMENTAL INSTRUCTION LEADER

University of Central Florida

Orlando, FL
December 2019 – May 2021

- Led hour-long, in-person, and remote sessions 4 times a week for Programming with C, providing comprehensive support to over 500 students in data structures, algorithms, recursion, dynamic memory, file I/O, etc.
- Determined course requirements with professors, analyzed student performance using Excel, and documented academic outcomes, resulting in a one-letter grade improvement for regularly attending students.
- Prepared extensively for a three-hour final exam session, crafting an exhaustive outline spanning a four-month course.

Skills & Technical Proficiencies

Software: Visual Studio, GitHub, Postman, Docker, Jenkins, VirtualBox, Jira, Confluence, Excel, Simio, Tableau, Minitab

Technical: React, React Native, CSS, HTML5, PostgreSQL, Expo, Node.js, Swift, Gradle, JavaScript, Java, Python, Go, C, C++, C#

AWS Services: Lambda, API Gateway, Cognito, Amplify, VPC, SAM, RDS, CDK, EC2, S3, SNS, IAM

Certifications/Education: Six Sigma Green Belt Certified, TestOut CyberDefense Pro Certified, Harvard CS50, Fluent Spanish