

## EDUCATION

Texas A&M University, B.S. Computer Engineering

3.96/4.0 GPA

## CERTIFICATIONS

Backend Software Engineer

Codecademy, 12/23

- Developed comprehensive skills in JavaScript, Express.js, Node.js, and PostgreSQL, focusing on server-side application development, RESTful APIs, and secure database practices.
- Implemented OAuth authentication and role-based access control within a personal finance application, enhancing data security and user-specific access to sensitive endpoints.

## WORK EXPERIENCE

Backend Software Engineer (Personal Project)

Houston, TX

IoTea

01/24 – present

- Developed a Command Line Interface (CLI) in Go for IoTea, an innovative IoT platform, enabling device management without coding and enhancing user experience.
- Engineered a containerized development environment using Docker and gRPC, facilitating efficient testing and development of IoT solutions on AWS.
- Extended HTTP-API to support enhanced device management, integrated a Prisma database for robust data management, and streamlined processes for IoT device provisioning.
- Implemented automated CI/CD workflows using Nx and GitHub Actions, ensuring efficient and error-free software releases.

Systems Engineer

Mesa, AZ

NXU

06/23 – 10/23

- Enhanced Battery Energy Storage System efficiency, reducing costs by 5% through strategic requirements definition and compliance with standards.

Technical Project Manager

Spring, TX

ExxonMobil Technology & Engineering Company

01/22 – 06/23

- Reduced maintenance costs by \$10M a year across the fleet by integrating vendor's equipment for predicting behavior inside fired heaters with ExxonMobil's network infrastructure, utilizing Red Hat OpenShift for containerization and deployment of software application.
- Led the technical development of an onshore command center for remote operation of four Guyana FPSOs, resulting in \$8M per year reductions in operating costs and significant improvements in operational reliability.
- Increased efficiency of plant operators by 30% by implementing cutting-edge Research & Development robotics applications for plant automation, contributing to enhanced safety measures.

Software Engineer

College Station, TX

Texas A&M University sponsored by Department of Defense Airforce

01/21 – 12/21

- Led agile software development team to design, build, test, validate, and deliver Fallen Object Detection(FoD) mats for the stakeholder, preventing millions of dollars of potential damage and hours lost looking for debris in aircraft.
- Enabled seamless data transfer between FoD mat and application through deploying software for Bluetooth communication between Atmega328 MCU and Android application for enhanced user experience.
- Enhanced safety protocols for DoD by engineering a PCB sensor matrix capable of accurately detecting fallen objects and displaying their precise locations via multiplexed LED matrix.

Embedded Systems Engineer Intern

Houston, TX

Houston Mechatronics

06/21 – 08/21

- Optimized Aquanaut AUVs operational accuracy and reliability by drastically improving its time precision through integrating a Real-Time Clock module, reducing time drift by a factor of four, crucial for precision-driven operations such as timely communication between system components.
- Engineered and assembled PCB breakout board using Altium for testing assembly, ensuring streamlined functionality testing, validation, and troubleshooting significantly reducing validation time and expediting system readiness.
- Spearheaded testing initiative by implementing a cost-effective power circuit for the Aquanaut computer testing platform, delivering an efficient and economical power solution for the robot testing assembly.

## TECHNICAL SKILLS

•Golang •AWS Cloud •Docker •Observability •CI/CD •gRPC •Red Hat OpenShift •Microservices •Git •Linux •OCI  
•JavaScript •C++ •C •C# •Python •SQL •PostgreSQL •TypeScript •Atmel •Arduino •Raspberry Pi •NVIDIA Jetson  
•UART •I2C •RS232 •RS485 •MQTT •modbus •ethernet •Unix •Bash •CURL •RESTful APIs •OAuth2.0 •Soldering  
•3D-printing •Altium •JAMA •MultiSim •LTspice •ETAP •Render •Debugging •Operating Systems •Agile Development

## PROFESSIONAL ATTRIBUTES

•Technical Leadership •Cross-Team Collaboration •Efficiency Optimization •Integration •Safety Enhancement  
•Adaptive Learning •Project Management