Zachary Melendez

860-327-3586 | zacmelendez@gmail.com

Profile

Action-oriented engineer with expertise in full stack software development, IoT, and mechanical systems integration with cloud-based solutions

Education

University of Connecticut   **August 2017 – May 2021**
Bachelor of Science in Mechanical Engineering – Minor in Mathematics
GPA: 3.7/4.0

Work Experience

CBS Interactive – Software Engineer   **May 2023 – Present**
- Build internal applications using TypeScript, React, and Node.JS to effectively manage live production data.
- Developed Python backend APIs for interaction with AWS RDS, which were then integrated into the user interface through an Apollo GraphQL server.
- Implement DevOps methodologies, including Docker containerization through AWS ECS and robust CI/CD pipelines in AWS CodePipeline.
- Execute comprehensive unit and integration tests using Jest & React Testing Library to ensure proper app functionality and reliability.

Henkel Corporation – IoT Development Engineer   **April 2021 – May 2023**
- Provisioned and managed Azure Cloud environment, including IoT Hub, Event Hub, serverless functions, and database to store data acquired from equipment.
- Developed IoT Modules in Python used to collect and aggregate data from production machines/IoT-enabled equipment.

Certifications

freeCodeCamp   **Dec 2021**
- Front End Development Libraries, JavaScript Algorithms and Data Structures, Responsive Web Design, Back End Development and APIs, Data Analysis with Python, Scientific Computing with Python

Microsoft: Azure Fundamentals   **Aug 2022**

Projects

Peadbo – Full Stack Developer   **Nov 2022 – Feb 2023**
- Worked with Lead Developer to create web application using NextJS and Typescript with AWS backend.
- Developed NodeJS and Python APIs used to create/update database entries with external data from both user events on the app and web hook events from external sources.

Volunteer Work

LIFE CO. Church   **Jan 2023 – Present**
- Developed custom filtering for church groups using vanilla JavaScript on WebFlow site
- Utilized Python and VanillaJS/Webflow to create visual representation of groups currently being hosted based off Church Community Builder API data
- Migrated existing services to AWS SAM to create a unified IaC architecture which allowed for easier management of AWS cloud services.

Technical Skills

Languages: JavaScript/Typescript, Python, HTML/CSS
Frameworks: React, Node.JS, Mantine, MaterialUI, Next.JS, SvelteKit, Serverless, AWS SAM, AWS CDK, Jest, React Testing Library
Developer Tools: Tailwind, SCSS, Git, Docker, Azure, AWS, VSCode, GraphQL/Apollo