

Zachary Laguna

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Objective

To secure a challenging software engineering position that will utilize my skills in designing, developing, and implementing high-quality software solutions for complex problems.

Languages & Technologies

Python	JavaScript	Angular
Java	Haskell	React
C++	PostgreSQL	Jenkins

Skills

Problem Solving	Relational Database Design	Technical Documentation
RESTful API design	Software Engineering	Communication
Cloud Deployment	Agile Methodology	Leadership

Experience

June 2022 - PRESENT

Fujitsu, Richardson, Texas – *Network Software Engineer*

- Analyzed the core problem and designed a solution that was optimized for several Fujitsu network hardware blades through extensive testing
- Developed and integrated Core Network Platform components, including cross-cutting concerns such as logging, security, persistence, high availability, notifications, messaging, RESTful APIs
- Implemented a microservices project turning Fujitsu's monolithic architecture into a scalable microservice with Docker
- Integrated solutions with existing codebase using Jenkins for Continuous Integration and managed a pipeline in collaboration with the DevOps team
- Collaborated in an Agile SCRUM team participating in discussions pertaining to architecture and cost-benefit analysis

June 2021 - August 2021

Fujitsu, Richardson, Texas – *Software Development Intern*

- Developed a Cloud Native network testing web application which identified misconfiguration of network hardware
- Introduced new technologies to Fujitsu including responsive design, Angular, Ionic, Flask / Django (Python) REST API, JavaScript, Kubernetes, and Docker microservices
- Collaborated in a SCRUM team using an Agile methodology
- Presented product to Vice President level management
- Collaborated with professionals with 10+ years of experience

Projects

Python, OpenCV, Flask, REST API, Cloud, Amazon EC2

Baby AI Monitor

- Used OpenCV computer vision library and a camera to create a baby monitor that used motion detection to signal if a baby reaches the edge of its crib
- Designed, documented, and implemented a full-stack application using CI / CD
 - Frontend: Flask (HTML, CSS, JavaScript)
 - Backend: Flask (Webserver), OpenCV (Python)
 - Cloud Deployment: Amazon EC2, Elastic Load Balancing

PostgreSQL, Express, React, Node, REST API, Cloud, Amazon EC2, Amazon RDS

Real Mgmt – *LIVE demo on Website*

- Led a team of 5 to develop a full-stack application based on the PERN stack. Hosted this application on AWS (Amazon Web Services).
- Designed a relational database that reflects real-world problems, reduces redundancy, and provides efficient data access
- Designed, documented, and implemented a full-stack application using Continuous Delivery
 - Frontend: React (HTML, CSS, JavaScript)
 - Backend: Node (JavaScript), Express, PostgreSQL (Database)
 - Cloud Deployment: Amazon EC2, Amazon RDS, AWS CodePipeline

RESTful API, Angular, HTML, CSS, Javascript, Apache, Docker, Spring Boot (Java), Raspberry Pi

Gordobot

- Created a robot that dispenses ingredients based on a recipe and user input on a web application
- Acted as Project Lead in designing GordoBot
 - Frontend: Angular (HTML, CSS, JavaScript)
 - Backend: Spring Boot (Java), Apache, Amazon EC2 (AWS), Docker, Python (Raspberry Pi), JavaScript

Education

August 2018 - December 2022

Texas A&M University, College Station, Texas – *BS in Computer Engineering*

This interdisciplinary program approaches both computer hardware and software from an engineering perspective. Students take courses in electrical circuits, microcomputer systems, programming languages, data structures, analysis of algorithms, and software engineering.

Leadership

January 2022 - December 2022

Sigma Alpha Mu, College Station, Texas – *Vice President*

- Led and oversaw 5 committees regarding event planning, recruitment, marketing, philanthropy, and scholarship
- Ensured a healthy financial state for the organization

Awards

Texas A&M University Honors Program - 3 yr

Texas A&M University Dean's List - multiple semesters