Zachary Laguna

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>>> http://zachary-laguna-portfolio-intern.s3-website.us-east-2.amazonaws.com <<<

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	Git	React
C++	PostgreSQL	Jenkins

Skills

Problem Solving	Relational Database Design	Technical Documentation
RESTful API design	Software Engineering	Communication
Amazon Web Services	Agile Methodology	Leadership

Education

January 2023 - PRESENT

Texas A&M University, College Station, Texas – *MS in Computer Science – 4.0 GPA*

I am currently pursuing a master's degree in computer science with a specialization in cybersecurity at Texas A&M University. This advanced program enhances my expertise in network security, artificial intelligence, and software development, equipping me with the skills I need for a career in creating secure, well-designed software.

August 2018 - December 2022

Texas A&M University, College Station, Texas – *BS in Computer Engineering – 3.3 GPA*

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.

Experience

August 2020 - December 2020

Texas A&M University, College Station, Texas – *Teaching Assistant*

- Instructed and supported students in an introductory engineering course, delivering comprehensive instruction in Python programming, including fundamentals and best practices.
- Provided one-on-one guidance and constructive feedback to students, aiding them in problem-solving, code optimization, and debugging, resulting in improved comprehension and performance.

- Demonstrated effective communication skills and the ability to break down complex programming concepts into digestible, practical information for diverse learners.

March 2019 - April 2019
NVIDIA, College Station, Texas – *Volunteer Machine Learning Instructor*

- Volunteered as an instructor for a machine learning class, working closely with a professor to provide students with comprehensive knowledge of machine learning fundamentals.
- Collaborated with the professor to tailor the curriculum, ensuring that it covered essential topics related to neural network architecture, backpropagation, and hyperparameter tuning, while also addressing broader machine learning concepts.

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 has reached 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

Leadership

January 2022 - December 2022
Sigma Alpha Mu, College Station, Texas – *President*

- Led and oversaw 5 committees regarding event planning, recruitment, marketing, philanthropy, and scholarship
- Ensured a healthy financial state for the organization
- Raised over 8000 towards Alzheimer's Research

Awards

Texas A&M University Honors Program - 3 yr
Texas A&M University Dean's List - multiple semesters
Safe2save Philanthropy Prize Winner