Jacob Montenegro

Cedar Park, Texas | (915) 808-1948 | jacob.m.montenegro@gmail.com | https://jacob-montenegro.vercel.app/

Software Developer

Experienced software developer skilled in designing and implementing robust software solutions. Proficient in various programming languages and frameworks, with a focus on creating efficient and scalable applications. Known for delivering high-quality code and innovative solutions that meet project requirements and exceed client expectations.

Key Skills

- **Programming Languages:** Java, Python, TypeScript, JavaScript, C/C++
- **Web Development:** React, Angular (13-16), Next.js, Node.js, HTML5, CSS, XML
- **Backend Development:** Spring Boot, RESTful APIs, Web Services, SQL, PostgreSQL, Microsoft SQL Server
- **DevOps and Version Control:** Git, GitHub, CI/CD
- **Operating Systems:** Windows, Linux
- **Methodologies:** Agile, Scrum
- **Other Skills:** Full-stack development, User Interface (UI) design, Web accessibility, Debugging

Experience

General Motors, Austin, Texas   **July 2021 – February 2024**
Software Developer

- Researched, designed, and developed a **web application** for training and deploying **Natural Language Processing (NLP) models** in vehicle defect diagnostics and repair, significantly aiding in the training of new technicians.
- Created a robust backend using **Java Spring Boot** to scrape data from online sources and store it in a **PostgreSQL database**.
- Collaborated closely with engineers and technicians in production plants to understand their needs and improve their efficiency through a comprehensive and straightforward UI using **Angular**.
- Conducted extensive self-study in **NLP** and **Machine Learning**, successfully applying this knowledge to build effective pipelines despite having no prior experience in these areas.
- The successful completion of the web application led to **improved performance in production**, a **decrease in faulty products**, and provided a **platform for continuous training** in new technologies.
- Conducted **in-depth research** and developed solutions for a synthetic image generation team, **enhancing AI computer vision models**.

The University of Texas at El Paso   **March 2019 – May 2021**
ACES Coordinator/Tutor

- Developed a **Java-based tutoring tracking tool** to streamline tutoring services, improving productivity and resource allocation.
- Created features for **logging and tracking hours** and **sorting tutors and students** by majors and courses, enhancing time management and student-tutor matching.
- Tutored approximately **35 students weekly** across majors like Computer Science, Electrical Engineering, Business, etc., in subjects like Computer Science, Computer Architecture, Calculus, Statistics, and Physics.
- Implemented **personalized tutoring strategies** that significantly improved students' course scores and fostered a supportive learning environment.

Leadership

Manufacturing Leadership Awards   **2023**
General Motors

- Manufacturing in 2030 Award Winners.
- Enterprise Integration and Technology.

Education

The University of Texas at El Paso   **August 2017 – May 2021**
Bachelor of Science in Computer Science with a Minor in Mathematics