Adrian Montenegro

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ABOUT ME

Civil engineering senior with full-stack development skills and a passion for Al-powered infrastructure. Created a LEED-inspired React app (OptoMat) with PostgreSQL backend and scoring algorithms. Now expanding into Kubernetes/cloud deployment to support smart city applications. Strong communicator, project leader, and bilingual (English/Spanish). Seeking Al-integrated roles at the intersection of civil innovation and modern tech.

EDUCATION Expected Graduation Date: Dec 2025

University of Nevada, Las Vegas, NV

Bachelor of Science in Engineering, Civil Engineering Portfolio: [yourname.dev] | GitHub: github.com/yourhandle

TECHNICAL SKILLS

Languages: JavaScript, TypeScript, Python (basic), SQL

Frameworks & Libraries: React.js, TailwindCSS, Node.js, Chart.js

Tools: Git, Docker (learning), PostgreSQL, VSCode

Infrastructure: JSON APIs, Linux CLI, Kubernetes (beginner)

Engineering Software: AutoCAD, SolidWorks

PROJECTS

OptoMat LEED-Inspired Full-Stack App for Sustainable Materials

January 2025 – Present

Honors College

- Engineered a React + TypeScript web app to evaluate construction materials based on environmental/structural data
- Integrated PostgreSQL database and backend API with advanced search, filter, and bulk upload capabilities
- Designed LEED-style dashboards with TailwindCSS and Chart.js for material scoring and project reports
- Currently prepping for Docker and Kubernetes deployment to support future scalability and cloud hosting

Research Publication: Lethal Learning

August 2022 – December 2022

- Analyzed 50+ U.S. school shootings for published research, proposing engineering-based design solutions to enhance school safety and reduce risk.
- Presented findings to an audience of 200+ at the Office of Undergraduate Research 2022 Fall Research Symposium Engineers Without Borders USA: Engineering for People Design Challenge

 August 2019 May 2020
- Led the design of a 25-unit sustainable residential area for a Chilean community, focusing on efficient use of local materials and renewable energy integration
- Applied civil engineering principles in water management, waste reduction, and structural design, earning national recognition and a \$1,200 scholarship for innovative solutions

ORGANIZATIONS

The Associated General Contractors (AGC), UNLV

January 2024 - Present

- Competed in the regional AGC Bridge Building Competition, applying structural design principles to create an efficient and competitive design with 3 other team members
- Actively contributed to chapter activities, organizing construction site tours and networking events

Society of Automotive Engineers (SAE) Baja, UNLV

August 2024 – Present

 Contributing to the engineering and fabrication of the RR7 vehicle, focusing on the integration of a 4WD system for the upcoming Baja SAE international competition

EXPERIENCE

Engineering Student Advisor, Howard R. Hughes College of Engineering, Las Vegas, NV August 2024 – Present

- Presented detailed information about state-of-the-art labs and over 10 extracurricular activities and clubs
- Led 3–4 hour tours for 20+ prospective students, showcasing hands-on learning, research, and career pathways.

Backlit, Superbowl LVIII - Field

January 2024 - February 2024

- Worked with hundreds of new people daily, coordinating technical movements and synchronization
- Committed to 50+ hours of practice leading up to the event, ensuring flawless execution during the live performance

AWARDS/HONORS

- Dean's List Honoree: Fall 2023, Spring 2022, Fall 2020
- J Robert Sletten Civil Engineering Scholarship \$1,000

Louis Stokes Alliances for Minority Participation Stipend Research - \$5,000

June 2023 January 2021

ADDITIONAL

- Languages: Native English, Native Spanish, Intermediate Italian
- Interests: Al for infrastructure, fitness, music production, and creative writing