Gregory Calderon

San Fernando, CA | 818-624-3238 | github.com/greg-of-Earth | https://greg-of-earth.netlify.app/ | greg87calderon@gmail.com

PROFESSIONAL SUMMARY

Software Engineer with strong skills in **C/C++, Python, and embedded systems programming**. Experienced in developing software for **STM32 microcontrollers, Raspberry Pi, and real-time systems (RTOS)**, with expertise in **autonomous system integration and computer vision**. Skilled in design and optimization within **Linux environments**. Additional background in full-stack development and data analysis. Strong foundation in **Agile workflows, collaborative research, and rapid prototyping through hackathons**.

TECHNICAL SKILLS

Languages: C++, C, Python, JavaScript, Assembly, HTML5, CSS, SQL
Embedded Systems & Tools: STM32, Raspberry Pi, RTOS, UART/SPI/I²C, PWM, Telemetry, Servo Control
Frameworks & Libraries: NumPy, Pandas, Matplotlib, SciPy, TensorFlow, OpenCV
Cloud & DevOps: Git, GitHub, AWS Cloud Practitioner (Foundational), Agile/Scrum
Specialties: Embedded systems programming, real-time software design, avionics integration, computer vision, sensor fusion, control systems

EDUCATION

California State University Northridge – B.S. Computer Science, Minor in Physics, GPA: 3.88 *(May 2025)*
Los Angeles Mission College – A.S. Computer Science, A.S. Mathematics, GPA: 3.9 *(May 2023)*

EXPERIENCE

Ute Aerospace – Software Engineer Intern ..... *(Jun 2024 – Aug 2024)*

- Built full-stack infrastructure with **Django REST and React** to support aerospace website.
- Designed **UI/UX** of company website while integrating **RESTful APIs** for data exchange.
- Scheduled to contribute to **DO-178-compliant safety-critical embedded software development** for **drone flight systems**.

PROJECTS

SAE AERO – Autonomous Aircraft *(Python, C++, RTOS, OpenCV)* ..... *(Jun 2024 – May 2025)*

- Led avionics team to design fully **autonomous payload capture/delivery aircraft**.
- Programmed **STM32 microcontrollers** and **Raspberry Pi** to handle servo control, telemetry, and sensor integration.
- Developed computer vision software for **object detection and geo-location**.

Code-For-A-Cause Hackathon – ADA-Compliant Game App *(TypeScript, React, CSS)* ..... *(Feb 2024)*

- Won **2nd place** in 48-hour hackathon hosted by **CSUN & Northrop Grumman**.
- Implemented accessible UI components ensuring **ADA compliance** for visually impaired users.
- Optimized **front-end** performance and **state management**, improving responsiveness across devices.

Exo-Stellar Debris Field Identification *(Python, Pandas, NumPy, Matplotlib)* ..... *(Jan 2023 – Jun 2023)*

- Processed and analyzed **17,000+ datasets** from NASA's Spitzer & Gaia telescopes.
- Built **multi-stage filtering** and visualization pipeline using Python in collaboration with **JPL scientists**.

AWARDS & LEADERSHIP

- **1st Place**, Girls-Who-Code Hackathon *(2024)*
- **Avionics Lead**, SAE Aero Team *(2024–2025)*
- **Magna Cum Laude** *(2025)*