

EMILIO CHONG-DÁVILA

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EDUCATION

University of Puerto Rico | College of Engineering Mayagüez, Puerto Rico
Bachelors of Science in Computer Engineering May 2028

The University of Georgia | College of Engineering Athens, Georgia
National Exchange Student August 2025 - December 2026

RELEVANT COURSEWORK

Data Structures & Algorithms; Microprocessors & Embedded Systems; Discrete Mathematics; Linear Algebra;

WORK EXPERIENCE

Sonos, Inc. Boston, Massachusetts
Software Engineering Intern June 2026 - Present

- Writing low-level firmware for the Nordic nRF52840 on Zephyr RTOS, using Claude to help set up DeviceTree configurations, develop register-level code and to get through the hardware abstraction layers faster.
- Building and tuning C/C++ firmware that sends and reads high-frequency ultrasonic chirps and managing BLE advertising and receiving, allowing devices to find and communicate with each other.
- Cutting development time by about 14% by using Claude to draft unit tests, lay out finite state machines, and write starter driver code that I then review and build on.

Compound Inundation Team for Resilient Applications (CITRA) Athens, Georgia
Research Assistant August 2025 - December 2026

- Helped build a compound flood model that links river and coastal flooding so the team could run flood analysis and support planning for infrastructure and coastal protection projects.
- Wrote a two-dimensional wetting and drying algorithm that sorts node status in numerical meshes based on rainfall, water depth, and flow speed, which helped the model run faster and stay closer to real conditions; leaned on Claude to debug the logic and clean up the code.
- Worked with the CITRA team through weekly meetings and data checks to keep research goals lined up with the model, and used Claude to help draft and organize the technical documentation.

PROJECT EXPERIENCE

Snake Game, Parking Simulation System, Personal Website

SKILLS

Programming Languages and Software: C++, C, Fortran, MATLAB, AutoCAD, Git

Hardware: Nordic nRF52840, Texas Instruments MSP430FR6989, Raspberry Pi 5

Additional Skills: Debugging, Troubleshooting Large Codebases, Adaptability, Fluent English and Spanish.

HOBBIES & INTERESTS

Alternative Music, Landscape Photography, Peer Mentorship, STEM Tutoring, International Travel