Jeremiasz Dados

Cell: (352) 721-1435 Email: jdados02@gmail.com

EDUCATION

University of Florida, Herbert Wertheim College of Engineering, Gainesville, FL

Aug 2022-Present

- Bachelor of Science in Computer Engineering, GPA: 3.88
- Relevant courses: Digital IC Design (VLSI), Electronic Circuits, Digital Design, Microprocessor Applications, Intro to Software Engineering, Computer Architecture, Behavioral Neuroscience

WORK EXPERIENCE

Astera Labs May 2025-Present

Firmware Engineer Intern

San Jose, CA

- Created low-level drivers for PCIe connectivity ASICs in the C programming language.
- Contributed thousands of lines of new feature code to firmware released to all Astera chips.
- Built a new firmware submodule from scratch, significantly expanding the ASICs' communication capabilities and reducing their boot time by 42%.

Neural Interface Technology Lab, University of Florida

Aug 2023-Present

Undergraduate Research Assistant

Gainesville, FL

- First author of paper (<u>A Compact Sub-Scalp Device for Powering Brain Implants</u>) published in the IEEE EMBC 2024 conference.
- Leading a research project designing an implantable EEG device, described in a paper submitted to IEEE NER 2025 (first author).
- Research projects received the Emerging Scholars and University Scholars awards from UF.
- Involved in an implantable electrode design project targeting a patent application as a co-author.

Analog Devices May 2024-Aug 2024

Research Engineer Intern

Boston, MA

- Co-author of a company patent for an electronic device used in hydrogen production systems.
- Designed and built prototypes of a high-current (400+ Amp) and high-voltage (100+ V) switching circuits.
- Developed firmware for an ARM Cortex-based IoT system and helped set up a CI pipeline for its Git repository.

Department of Electrical and Computer Engineering, University of Florida

Jan 2024-Dec 2024

Undergraduate Teaching Assistant

Gainesville, FL

- In-class mentorship, grading, and office hours for Introduction to Signals and Systems (EEL3135).
- Main topics of the class include signal processing in MATLAB, Fourier transform, sampling, and Z transform.

Johnson & Johnson May 2023-Aug. 2023

Electrical Engineering R&D Co-op

Cincinnati, OH

- Analyzed experimental data to quantify the performance of medical device prototypes.
- Using statistical analysis, developed a power delivery algorithm for a tissue sealer prototype to improve its seal strength by 20% and reduce the sealing time by 50%.
- Programmed a prototype BLE interface for electrosurgical devices using TI Launchpad boards.

SKILLS

- Cadence Virtuoso, Altium Designer, LTspice, PSpice.
- Verilog, SystemVerilog, VHDL, Quartus, ModelSim, FPGA, Digital Design for ASIC.
- C, C++, Python, MATLAB, JavaScript, NodeJS.

AWARDS

- UF University Scholars Program
- UF Emerging Scholars Program
- UF Sunshine Scholarship