Carsten Thue-Bludworth
Computer Engineer

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Profile

Enthusiastic engineer and teacher skilled in design, prototyping, and deployment of hardware-software systems. Strong background in theory and practice of electronics and programming. Ability to grasp complex problems and develop effective solutions on a diverse team. Excellent team member with strong communication skills and attention to detail.

Education

Master of Science in Computer Engineering *University of Florida*   **Gainesville, FL** *2024*
Bachelor of Science in Engineering Physics *Cornell University*   **Ithaca, NY** *2017*

Professional Experience

Computer Engineering Lab Manager & Adjuct Lecturer, *University of Florida* **Gainesville, FL** *11/2021 - present*
Responsible for the operation and maintenance of an 80-student electronics laboratory which serves as a functional workshop for design, prototyping, and testing of computer engineering projects. Instructor of record for multiple computer engineering courses, with active collaboration on development and delivery of novel course content to students. Gives guidance on capstone projects from a practical, industry-experienced point of view. Passionate about sharing engineering intuition and communication skills with students.

Electrical Engineering Technician, *Altavian, Inc*   **Gainesville, FL** *02/2019 - 02/2020*
Responsible for testing, integration, and repair of micro-electronics on small UAV. Excellent ability to troubleshoot and repair SMT circuitry under a microscope. Successful use of experimental techniques to improve the performance and reliability of products, including RF subsystems. Demonstrated ability to expand into new roles through design and testing of printed circuit boards and microcontroller firmware.

Materials Scientist, *Sinmat, Inc*   **Gainesville, FL** *01/2018 - 011/2018*
Responsible for research and development of Chemical Mechanical Planarization slurries used to polish advanced electronic and optical materials. Gained hands-on experience with handling and analyzing semiconductor wafers. Extensive laboratory and data analysis experience in a small, motivated, fast-paced team.

Teaching Experience

- Computer Engineering Senior Design 1 & 2 (Fall 2023/2024, University of Florida)
- Introduction to Computer Organization (Summer 2024, University of Florida)

Skills

- **Software Development:** Python, Rust, C/C++ on hosted and bare-metal targets
- **Hardware Design**: Digital Interfaces, Assembly & Troubleshooting, Edge AI & Hardware Acceleration
- **Tools and Frameworks:** Altium Designer, KiCad, Git, Linux CLI

Publications

Thue-Bludworth, C., and Blanchard, J (2024, June). Iron Coder – An Integrated Development Environment for Embedded Development in Rust. In *2024 ASEE Annual Conference & Exposition.*