William Fairman

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EDUCATION

Florida Atlantic University **Boca Raton FL** **Aug 2025**
PhD in Electrical Engineering – GPA 4.00

Florida Atlantic University **Boca Raton FL** **May 2023**
MS in Electrical Engineering – GPA 4.00

Olin College of Engineering **Needham MA** **December 2021**
BS in Electrical and Computer Engineering – GPA 3.87

EXPERIENCE

Harbor Branch Oceanographic Institute Graduate Research Assistant **January 2022 – Present**

- Work on electrical, software, and mechanical aspects of several on-going research projects in the System and Imaging Lab (SAIL).

Florida Atlantic University Marine Renewable Energy REU intern **Summer 2021**

- Developed an automated drone charging platform controlled by a self-designed circuit board.

Intel SoC Pre-Silicon Validation Intern **July 2020 – December 2020**

- Used the Verdi Coverage tool to provide Verilog coverage analysis for a SoC IP.

Kuva Systems (MultiSensor Scientific) Electrical and Computer Engineering Intern **Summer 2019**

- Developed C code, Python scripts, and Verilog code for interfacing with a variety of sensors, ARM microcontrollers, and FPGAs on an infrared camera module.

Olin Electric Motorsports - FSAE Electric Sensors Lead **September 2017 – June 2019**

- Designed and tested printed circuit boards for high and low voltage systems.
- Wrote embedded firmware for AVR chips (Atmega16M1 & 328P).

PROJECTS

Coaxial Copter **Summer 2023 – Present**

- Developed a NDAA compliant, waterproof 1.5kg drone with a fully 3D printed thrust vector control mount.

Biomass Sensor **Spring 2022 – Present**

- Developed and manufactured a novel IoT algae biomass sensor.
- Created a custom circuit board and wrote embedded software to control the sensor.
- Designed and manufactured a 3D printed, waterproof housing.

Quad Copter **Fall 2020 – Spring 2021**

- Designed a flight computer powered by a STM32 processor with a GPS, IMU, magnetometer, and barometer sensor suite.
- Designed a 3D printed drone chassis using Fusion 360's Generative Design tool.

SKILLS

Software/Programming
Python, KiCad, Verilog, C, Matlab, Git, Fusion 360, Solidworks

Machine Skills
Basic machinery, CNC Router, 3D Printer, Laser Cutting