# **Lang Towl**

Computer Engineer

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# **Career Objective**

Enthusiastic Computer Engineering undergraduate student looking for an entry level position where I can apply skills in software engineering, hardware design, and sustainability to innovate solutions to pressing environmental issues.



## **Education**

Pursuing a **B.S.** in Computer Engineering Concentrated in Electric & Autonomous Vehicles

Florida Polytechnic University Expected Graduation: May 2025

GPA: 3.5

## **Notable Positions**

- · Provosts List for Academic Standing
- MCLA Div. II Lacrosse Captain 2021-2022
- Youth Ambassador to Parley for the Oceans
- Student Government Director of Internal Affairs



## **Projects & Work Experience**

## **IOS App Development** 2023 → Current

- In the process of developing an IOS app that provides users with short term surf forecasts and local weather conditions
- Enables users to drop pins at their favorite locations, and will stream up-to-date buoy data from the nearest NDBC station, and notify users when conditions meet desired criteria.

#### Skills Learned:

- Foundational skills in Swift and SwiftUI for IOS app development
- Python for algorithms and communication with APIs

## **Verilog Military Stopwatch** 2022 → 2022

- Designed a fully functional military style stopwatch using Verilog hardware description language.
- Design was composed of the following modules: half/full adder, ripple carry adder, BCD converter, clock divider, D and T flip-flop, 4 bit register, and LCD controller.

#### Skills Learned:

- Learned the basics of Verilog programming, and how to use FPGA for testing and output
- How to design a complex electrical system from the transistor level

## **Open Source Keyboard Design Project** 2020 → 2021

- Designed a fully functioning computer keyboard driven by an ATMEGA32-U4 chip, on a custom PCB, programmed in C++.
- PCBs were manufactured by JLCPCB, and the components were soldered by hand.

#### Skills Learned:

- PCB design, fabrication, and optimization
- C++ programming and optimization

#### Manta Fin Co. 2019 $\rightarrow$ 2020

- Worked on founding an LLC that manufactured and produced high performance surfboard fins from up-cycled ocean plastics.
- Fins designed using Fusion 360, tested in SolidWorks, with rapid prototyping using 3D printing and CNC milling.

#### Skills Learned:

- 3D modeling, product design, and CFD testing techniques
- Basic business management practices



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