# Lang Towl **Computer Engineer**

- S Florida Polytechnic University 🖂 langtowl@gmail.com & (207)808-3344
- www.linkedin.com/in/langtowl
- {} github.com/langtowl
- ✓ langtowl.com

# **Education**

B.S. in Computer Engineering Concentrated in Machine Intelligence Florida Polytechnic University Graduation: May 2025 | GPA: 3.5

# **Projects & Work Experience**

### Software Developer: IOS App Development

- Actively developing an IOS app for athletes and personal trainers in the fitness industry.
- Features an expandable exercise library used to create custom programs with growth-focused analytics. **Skills Applied:** 
  - Foundational skills in Swift and SwiftUI for developing UI/UX
  - Designing back end app architecture

### **Computer Engineer:** Verilog Military Stopwatch

- Designed a fully functional military style stopwatch using Verilog hardware description language.
- The software was written at the transistor level using Quartus Prime and deployed to an FPGA.

**Skills Applied:** 

- Foundational skills in Verilog programming and FPGA usage for prototyping
- How to design a complex computer system at the transistor level

### Hardware Engineer: Open Source Keyboard Design Project

- Designed a fully functional computer keyboard driven by an ATMEGA32-U4 mounted on a custom PCB.
- PCBs were outsourced to JLCPCB, components were soldered by hand, and the software was written in C++.

#### **Skills Applied:**

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

#### **Environmental Conservation:** Youth Ambassador - Parley for the Oceans Aug. 2019 $\rightarrow$ May 2021

- Worked within an international team of youth activists on several environmental initiatives.
- Projects included beach cleanups, documentary series, and R&D for sustainable fishing equipment alternatives. **Skills Applied:** 
  - Small team/project management within a large international organization
  - Experience developing and presenting pitch decks to project managers

### Entrepreneur: Manta Fin Co.

- Identified opportunities in the surf industry for sustainable equipment alternatives.
- Worked on founding an LLC that manufactures high performance surfboard fins from up-cycled ocean plastics. **Skills Applied:** 
  - Fins designed in Fusion 360, CFD in SolidWorks, rapid prototyping with 3D printing & CNC milling
  - Basic business management practices

# **Industry Skills**

- C & C++ Programming
- Proficiency in HTML & CSS for Web Development
- Proficiency in Swift & SwiftUI for IOS App Development

## **Leadership Positions**

- Provosts List for Academic Standing
- MCLA Div. II Lacrosse Captain 2021-2022

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- PCB Design & Fabrication
- · Proficiency in Verilog Programming for FPGA's
- CAD (Fusion 360, Eagle CAD, SolidWorks, MatLab)
- Youth Ambassador to Parley for the Oceans
- Student Government Director of Internal Affairs

Mar. 2023  $\rightarrow$  Current

Nov.  $2022 \rightarrow \text{Dec.} 2022$ 

Nov. 2020  $\rightarrow$  Feb. 2021

Sep. 2018  $\rightarrow$  May 2019