

# TYLER WADEKAMPER

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## SUMMARY

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- Results-oriented avionics engineer with a passion for software development.
- Versatile capabilities include front-end, back-end, and hardware design as well as program management.

## SKILLS

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- HTML, CSS, JavaScript, Ruby on Rails, Python, C/C++, Linux, Bash, PostgreSQL, Git, Docker, Bootstrap.
- Outstanding knack for problem-solving, excellent communication and collaboration ability, consistent hunger to learn new technologies and concepts.

## EDUCATION

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**Bachelor of Science, Electrical and Electronics Engineering**

**2019**

*Seattle Pacific University, Seattle, WA*

## PROFESSIONAL EXPERIENCE

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**Electrical Engineer**

**2019 - Present**

*Astronics Advanced Electronic Systems, Everett, WA*

- Wrote native Linux software in C to test avionics digital I/O circuit cards in embedded systems.
- Developed an automated browser utility with Python that streamlined the configuration management system.
- Designed multi-protocol I/O cards for embedded military applications with USB, PCIe, Ethernet, and avionics functionality.
- Defined the architecture for the next generation of compact I/O converters. Made trade-off decisions for processor, memory, user storage, and I/O interfaces.
- Executed comprehensive testing and documentation of embedded products to stringent EMI, electrical, and environmental standards.
- Managed a mid-scale program to create single protocol avionics cards for a lab environment. Led a team of eight to meet requirements, schedule, and budget constraints.

## PROJECTS

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**RefNetwork – ref-network.onrender.com**

**2022 - 2023**

- Constructed a social networking site for football officials where users can share rules questions and answers using Ruby on Rails, which handles the MVC framework and database integration.
- Utilized Bootstrap, JavaScript, and CSS to complete the fully-responsive front-end.
- Implemented an end-to-end test suite, RESTful architecture, and user/request authentication system.

**Ruby Chess – ruby-chess.onrender.com**

**2022**

- Created a fully-featured command line chess game using object-oriented design in Ruby.
- Completed extensive Rspec test coverage using a hybrid test-driven development strategy from the outset.
- Deployed the program in a docker container in order to isolate the shell environment and minimize dependencies.

**RetroCalc – tylerwadekamper.com/calculator-top**

**2022**

- Designed a calculator application that handles multiple lines of input, decimals, and memory that is styled like an original gameboy. The project consists of HTML, CSS, and JavaScript.
- Developed a state management engine that handles all calculation and text manipulation procedures.

**Paint for Dummies – tylerwadekamper.com/paint-top**

**2022**

- Built an application similar to MS paint, where users can choose brush size and color to draw on a canvas. The program uses HTML, CSS, and JavaScript.

## COURSES

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**The Odin Project**

**2021 - 2022**

- Finished the self-guided web development curriculum over the course of a year, culminating in the completion of multiple full-stack projects.