**Experience**

Full-Stack Software Engineer (Remote) at [Racing Alpha](https://neilmarcellini.com/experience/RacingAlpha.html), April 2020 - Present

Racing Alpha is a web app for analyzing sailing GPS tracks to improve racing performance.

* Created algorithms to extract numerous metrics from sailing GPS tracks.
* Developed new interfaces allowing users to understand and interact with their metrics.
* Cleaned up the UI/UX to create a responsive design using Buefy components, Bulma CSS, and general design principles.
* Debugged existing features and optimized performance.

Technologies: (Python, Django, Javascript, Vue, Mapbox GL JS, HTML, Sass, git)

Front-End Software Engineer (Remote) at [Fitdigits](https://neilmarcellini.com/experience/Fitdigits.html), May 2020 - August 2020

Fitdigits is a fitness platform with a web app and mobile apps such as [iCardio](https://apps.apple.com/us/app/icardio-workout-tracker/id314841648) and [iRunner](https://apps.apple.com/us/app/irunner-run-jog-tracker/id304074554).

* Upgraded old Angular.js web pages to Angular.
* Modernized the design and user experience with Angular Material UI.
* Suggested and implemented a new system for localization using ngx-translate and added localization to numerous pages.

Technologies: (Typescript, Angular, Javascript, Angular.js, HTML, CSS, git)

Computer Science Tutor at [CSUCI Computer Science Tutoring Center](https://neilmarcellini.com/experience/CSUCI-CS-Tutor.html), February 2018 - May 2021

Provides a space for CS students to get help on assignments, ask questions, and do focused work.

* Answered peer questions.
* Guided students through programming projects.
* Explained concepts on the whiteboard.

Technologies: (C, Java, Python, Swift, SwiftUI, SQL, git)

**Education**

Bachelor of Science in Computer Science, Minor in Mathematics, Magna Cum Laude, May 2021

California State University Channel Islands, Camarillo, CA (3.8 GPA)

**Projects**

[Portfolio](https://neilmarcellini.com)

A place to showcase my work and provide additional explanations about my experience.

Technologies: (Javascript, Web Components, HTML, CSS)

[SailVMG](https://neil-marcellini.cikeys.com/capstone/)

For my senior capstone project, I built an IOS app for racing sailors and kiteboarders to record and receive real-time feedback of VMG. VMG is the component of a sailor’s velocity in the upwind direction and is a key racing metric.

Technologies: (Swift, SwiftUI, Combine, Firebase)

[AMEL](https://neilmarcellini.com/experience/AMEL.html) (Arial Mission Event Log)

AMEL is an app for fighter pilots in training to record events while they fly using a screen of customizable buttons.

Technologies: (Swift, SwiftUI, Core Data, Core Location, git)

**Awards**

Semester Honors, CSU Channel Islands (Fall 2017 - May 2021)

U.S Youth Sailing Championship 2017, 1st place 29er - Corpus Christi, TX

World Sailing Youth Championship 2017, 7th place 29er - Sanya, China