Neil Marcellini

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Experience

Full-Stack Software Engineer (Remote) at Racing Alpha, 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, May 2020 - August 2020
Fitdigits is a fitness platform with a web app and mobile apps such as iCardio and iRunner.
- 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, 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
A place to showcase my work and provide additional explanations about my experience.
Technologies: (Javascript, Web Components, HTML, CSS)

SailVMG
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 (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