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, 5/26/2020 - 7/30/2020
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 - Present
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, 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

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)

Ideate
Ideate is a social media site for users to share and iterate on their ideas.
Technologies: (React, Redux, Material UI, Node, Express, JWT, MySQL, Heroku, S3, ClearDB)

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