Ali Momennasab

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Education

California State Polytechnic University, Pomona   Aug 2022 - Dec 2025 (Expected)
Bachelor of Science, Computer Science   Pomona, CA
- GPA: 3.91/4.0
- Relevant Coursework: Data Structures and Advanced Programming, Design and Analysis of Algorithms
- Activities & Awards: Computer Science Society, Software Engineering Association, Dean's List

Experience

Cardiac Vision Lab, University of California, San Francisco   Jun 2023 - Present
Research Assistant   Remote
- Researching deep learning methods for segmenting ultrasound heart data under Professor Jan Christoph.
- Generated synthetic heart ultrasound data with two approaches: utilizing Tensorflow to train a GAN model, and developing MATLAB ultrasound simulation scripts.
- Assisted in training a UNet model with 10,000 synthetic ultrasound images.

Code Ninjas   Jun 2023 - Present
Programming Tutor   Hacienda Heights, CA
- Taught classrooms of 20+ elementary school-aged children programming and problem-solving skills with HTML/CSS/JavaScript.

Projects

BroncoDirectMe | broncodirect.me   Aug 2022 - Present
BroncoDirectMe is a web extension with 350+ users that improves Cal Poly Pomona's class registration portal.
- Utilized React, TypeScript, and Material UI for new portal features, such as displaying average course GPAs and RateMyProfessor data fetched using REST API's, increasing the functionality of the portal.
- Designed modernized website UI mockup using Figma, enhancing the user experience and presentation of the portal.
- Coordinated multi-week agile sprints for 20+ Cal Poly Pomona students by writing main objectives, technical tasks, and pull request acceptance criteria. Participated in 100% of team scrums.
- Achieved the Google Featured Extension badge by adhering to Chrome Web Store's best practices, increasing visibility and user engagement.

NFL Mock Draft Simulator | github.com/alimomennasab/NFLMockDraft   Jun 2024 - Aug 2024
An NFL Mock Draft simulator for the 2025 draft class.
- Web scraped 32 NFL teams, 250+ draft picks, and over 200 college prospects with Selenium, storing the data in a PostgreSQL database.
- Designed and implemented a responsive user interface with React and TailwindCSS, featuring draft simulation and an interactive trade system.
- Implemented server-side rendering and API routes with Next.js, utilizing Prisma for efficient database queries.

Somnos | github.com/alimomennasab/Somnos   Sep 2021 - May 2022
Somnos is an IOS mobile application for alerting long-distance drivers against falling asleep at the wheel.
- Developed an accurate eye-tracking system using Swift and the ARKit library, achieving 96% accuracy.
- Demoed prototype application to school district superintendents and 50+ students.

Skills

Languages: Java, C++, Swift, C, Python, TypeScript/JavaScript, MIPS Assembly
Frameworks: React, Next.js, MUI, TailwindCSS, Prisma, Selenium, PyTorch, TensorFlow, ARKit
Development: GitHub/GitLab, Figma, LaTex