

## Pirouz Mehmandoost

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### Summary

Driven software engineer with a background in front-end development using JavaScript frameworks.

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### Technical Skills -

- Programming: JavaScript, TypeScript, React, Next.js, Redux, Zustand, CSS, Styled Components, Tailwind CSS, OpenGL, WebGL, Three.js, React Three Fiber, Drei, GSAP, HTML, Java, C++, Git.
  - Design: Blender, Autodesk Fusion 360, Adobe Photoshop, Adobe Illustrator, Figma.
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### Projects

Portfolio Site: <https://para-pi.vercel.app/>

- Developed an app to showcase personal 3D printing projects and render interactive 3D models on web browsers.
- Next.js based using App Router pattern for routing/navigation, styled with Tailwind CSS and deployed using Vercel.
- Used Zustand to manage app state, and React Three Fiber hooks to cache 3D assets and optimize WebGL rendering.
- Used React Three Fiber and GLTFJSX libraries to render interactive 3D scenes as JSX components.
- Designed 3D models using Blender and Autodesk Fusion 360, and 3D printed models using a Prusa i3 MK3S+ 3D printer.

Product Design: Developed A collection of 3D printed handbags, fitness accessories, and footwear.

- Developed a proprietary technology: a modular footwear design that allows end-users to modify the shape and color of footwear.
  - Developed an embedded lock mechanism with automatic lock and manual unlock.
  - Incorporated the lock design in 3D printed footwear and a stylized Yoga mat holder.
  - Tested developing prototypes in-house using a range of materials including TPU, TPE, Nylons and Nylon composites.
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### Professional Experience

Junior Software Engineer, Altair Engineering, Berkeley, CA, 08/2020 - 02/2022

Project: Redesign the [Toggled IQ](#) mobile application

- Re-wrote all app state management logic to utilize Redux Slices.
- Developed a login feature with logic compliant to AuthNZ standards for React Native apps.
- Developed a "scenes" feature that enables controlling and configuring settings on multiple smart flood lights and tubes.
- Developed a "schedules" feature to apply "scenes" settings based on configurable schedules.
- Developed a smart device detection feature to configure line-of-sight devices and sync local data with a cloud API.
- Collaborated with a lead engineer to develop a UI controls panel for configuring IoT hardware.

Project: TypeScript-based Web app for an IoT platform

- Collaborated with a lead engineer to implement Redux (CreateSlice) for managing application state.
- Developed a floor map visualization feature for displaying overlays of data pertaining to floors in multistory buildings.
- Developed a feature to visualize and tabulate hierarchical IoT network data. Enabled table filters, tooltips, and breadcrumb navigation to ease traversing complex hierarchies.

QA Software Engineer, Altair Engineering, Berkeley, CA, 09/2019 - 08/2020

Project: QA test suite against new API

- Assessed use cases for leveraging the Postman API testing platform and developed a presentation to share insights.
- Wrote the QA team's first JavaScript-based API tests using Postman and demonstrated use of the Newman CLI.
- Documented team standards for writing API tests, repository management, and usage of Postman.
- Gained familiarity with AuthNZ2.0 and OAuth standards within the context of API testing, and SSO on React-Native apps.
- Maintained communication with the backend team during multiple stages of REST API development and deployment.

Intern QA Engineer, Altair Engineering, Berkeley, CA, 06/2019 - 09/2019

Project: QA test suite against new API

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Graduate Student Assistant, Mills College, Oakland, CA, 08/2017 - 05/2019

- Graded coursework for introductory and intermediate object-oriented programming classes using Java.
- Provided on-campus tutoring for Discrete mathematics 1.

Computer Science Tutor, Ohlone College, Fremont, CA, 06/2016 - 05/2017

- Conducted pair programming during class for 3 C++ based classes: introductory and intermediate OOP, and data Structures.
  - Provided on-campus group and individual tutoring.
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### Education

Post-Baccalaureate BA	Computer Science, Advanced Degree Prep Track Art, Persian Studies	Mills College SFSU	Oakland, CA San Francisco, CA	2017 - 2019 2009 - 2013
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