Pirouz Mehmandoost

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Summary
Driven software engineer with a background in front-end development. Experience developing interactive apps for the IoT industry.

Technical Skills
- **Programming Languages and Frameworks:** JavaScript, TypeScript, Next.js, React, React Native, Redux, Zustand, CSS, Styled Components, Tailwind CSS, HTML, Git, WebGL, Three.js, React Three Fiber, Drei, GSAP, React Spring, Java, C++.
- **Developer Tools:** Github, Gitlab, Visual Studio Code, XCode, Vercel, Chrome Developer Tools, Jira, Confluence, Postman.
- **Design:** Blender, Autodesk Fusion 360, Adobe Photoshop, Adobe Illustrator, Figma.

Projects
Portfolio Site: https://para-pi.vercel.app/
- Developed an app to display 3D printing projects and showcase rendering 3D graphics with WebGL.
- Next.js based App Router pattern for routing/navigation, and deployed using Vercel.
- Styled using Tailwind CSS.
- Used Zustand to manage app state.
- Used React Three Fiber to manage 3D models as JSX, cache assets such as computed geometries, and minimize WebGL draw calls.
- Experimented with GSAP, JEasings, Framer-Motion, and React Spring for animations.
- Designed 3D models using Blender software and retouched images using Adobe Photoshop.
- Produced functional prototypes of all 3D models using a customized Prusa i3 MK3S+ 3D printer.

Professional Experience
Junior Software Engineer, Altair Engineering, Berkeley, CA, 08/2020 - 02/2022
Project: Redesign the Toggled IQ mobile application (React Native)
- Re-wrote app state management logic to replace an older implementation of Redux, reduce code bloat and increase readability.
- Developed a login feature with logic compliant to AuthNZ standards for React Native apps.
- Developed a "scenes" feature which lets users configure the dim and warmth setting on mixed and hierarchical groupings of smart lights and tubes.
- Developed a "schedules" feature which lets users automate applying "scenes" settings.
- 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 flexible controls panel for dispatching batch commands to devices.
- Collaborated with embedded engineers during the development of IoT data schemas for controllable devices.

Project: TypeScript-based Web app for an IoT platform
- Collaborated with a lead engineer to design app state management logic using Redux Slices.
- 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. Included table filtering, 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
- 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.

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.

Education

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