Mohammadreza Zare

Senior Full Stack Engineer | Tabriz, Iran (Open to Remote or On-site in Tehran) | +98 9145750525 | mohammadreza.zr@yahoo.com
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PROFESSIONAL SUMMARY

Full Stack Engineer with 6 years of experience building enterprise systems, SaaS platforms, fintech, and AI-enabled products with TypeScript, React, Next.js, and NestJS. Owns features end-to-end, from database and API design to frontend implementation and deployment. Experienced with real-time systems (WebSockets, live order books and rankings), complex business logic, RBAC and permission models, and self-hosted infrastructure in an air-gapped environment. A background in Linux and system administration drives a focus on performance, security, and access control. Uses AI coding agents such as Claude Code and Cursor as part of delivery, with code review and automated tests as the quality gate.

TECHNICAL SKILLS

- **Languages:** TypeScript, JavaScript, Go
- **Backend:** NestJS, Node.js, Express, Gin, Supabase
- **Databases:** PostgreSQL, Redis, MongoDB
- **Frontend:** React, Next.js, TailwindCSS, Shadcn/UI, Ant Design, Zustand, React Query
- **Practices:** REST APIs, OpenAPI, WebSockets, RBAC & Permission Models, Multi-tenancy, Caching, Performance Optimization, Clean Architecture
- **Testing:** Vitest, Playwright, Storybook
- **Infrastructure & CI:** Docker, Linux, Nginx, GitLab CI, Vercel, Dokploy, step-ca
- **AI Tools:** Claude Code, Cursor, ChatGPT
- **Tools:** Git, n8n, Outline

KEY ACHIEVEMENTS

- Helped redesign an access-control model from per-role JSON trees to numeric permission bitsets, making every request's access check a route match plus a bitmask test.
- Built code generation that keeps the frontend in sync with several backend services' OpenAPI contracts, enforced in CI.
- Coordinated frontend development and mentored a small team of engineers, establishing code review standards and modernizing legacy codebases.
- Automated code-review workflows and CI/CD pipelines using n8n, reducing manual overhead and improving team velocity.

PROFESSIONAL EXPERIENCE

Frontend Engineer

Netpardaz Azar | Apr 2026 – Present

Sole architect and main developer of the frontend (800+ commits) for a large enterprise operations platform with 15 feature modules, real-time monitoring, maps, and reporting, served by several backend microservices. React 19, TypeScript, Vite, React Query, Tailwind.

- **Access Control:** Owned frontend access-control analysis and bug fixing with the backend team, and helped drive the switch from a 20–30 KB JSON permission tree per role to numeric permission IDs stored as bitsets (200+ permissions in 32 bytes), turning each access check into a route match plus a bitmask test.
- **Go Backend:** Implemented the group-management endpoints, with tests, in the Go authorization service using AI coding agents.
- **API Code Generation:** Built a generator, similar to Orval, that merges the OpenAPI specs of several backend services into a typed React Query layer on @mrzr/api-client. Generated models are the only entity types, and CI fails when generated code is stale.
- **Enforced Architecture:** Feature-sliced layering (pages → features → core) enforced by eslint-plugin-boundaries, plus a custom ESLint plugin for one-component-per-file, no external styling, and file-size limits.
- **Quality Gate:** GitLab CI (lint, typecheck, unit tests, API sync check), Husky and Commitlint, ~100 Vitest test files, and Playwright end-to-end tests against the real backend.
- **AI-Assisted Development:** Used AI coding agents such as Claude Code as a core part of delivery, with repository rules (AGENTS.md), lint, and CI keeping their output within the same architecture and standards.

- **Self-Hosted Infrastructure:** Set up internal services on Dokploy in an air-gapped environment (Outline, Mattermost, step-ca private CA for internal TLS).

Full Stack Engineer

Rastaar Creativity Development | Nov 2024 – Feb 2026

- **BitBox (Complex Logic Game):** Developed the backend using NestJS, PostgreSQL, and Redis for a puzzle game requiring intricate business logic, state management, and secure seed-phrase validation.
- **AI Character & Video Platform:** Built a Next.js/TypeScript web app integrating AI models for dynamic face and video generation. Developed reusable custom components and optimized client-side rendering performance.
- **Tournament Platform:** Built a scalable Next.js application with Shadcn/UI for hosting gaming tournaments, featuring real-time player ranking and complex scoring workflows.

Full Stack Developer

Melke Tabriz (Enterprise Real Estate Platform) | Feb 2023 – Nov 2024

- **Notification & Campaign Engine:** Developed a notification microservice using NestJS, MongoDB, and Firebase, with a server-side proxy to keep Firebase working in restricted networks and filtering by role, age, and department.
- **HR & Personnel Management System:** Engineered an internal enterprise tool with dynamic fields, complex approval workflows, and strict Role-Based Access Control (RBAC). Implemented caching strategies that significantly reduced server load.
- **Core Platform Redesign:** Led the redesign of the main platform using Next.js and TypeScript. Built dynamic forms for property listings and integrated real-time pricing and chat features with aggressive caching.

Frontend Developer

Raybit (Crypto Exchange) | On-site, later Remote | Oct 2021 – Oct 2023

- Developed a high-traffic cryptocurrency exchange with real-time order books using React and WebSockets.
- Optimized bandwidth consumption by minimizing socket payloads and implemented resilient UI patterns (e.g., blurring prices and auto-retrying) for unstable network conditions.
- Built an NFT marketplace and secondary exchange platform focusing on responsive UI and secure transaction flows.

Frontend Team Lead & Architect

Arka (Iran Comprehensive Trade System) | Part-time, Hybrid | Nov 2022 – Feb 2023

- Acted as Tech Lead, mentoring the development team and upgrading the legacy codebase to modern React/TypeScript standards.
- Analyzed and designed a scalable frontend for complex trade workflows, establishing coding standards and best practices.

Frontend Developer

Arvin Tav | Jan 2021 – May 2021

Admin panel features with jQuery and Bootstrap, and WordPress sites with custom themes.

OPEN SOURCE

- **@mrzr/api-client:** Zero-dependency TypeScript API client built on fetch, focused on browser authentication: coalesced token refresh, Web Worker token isolation, and cross-tab session sync. Docs | GitHub
- **nested-checkbox:** Zero-dependency React component for hierarchical tree checkboxes with recursive search and parent/child state sync. Docs | GitHub
- **react-light-tour:** Lightweight, customizable step-by-step onboarding tour guide for web applications. Docs | GitHub

LANGUAGES

Persian: Native | English: Strong reading and listening (technical documentation and meetings), intermediate speaking

EDUCATION

Undergraduate coursework, Roshdiyeh Institute of Higher Education, Tabriz (not completed); High School Diploma