Bahar Abbasi Delvand

EDUCATION

McMaster University

Bachelor of Computer Science

September 2020 — April 2025

Minor in Art History

* *Relevant Coursework:* Software Testing, Data-Driven Algorithms for Sequential Decision Making, Databases, Concurrent Systems, Information Security, Computer Networks and Security, Operating Systems, Data Mining

TECHNICAL SKILLS

Languages: JavaScript, TypeScript, Python, C, C++, C#, Bash, Golang, Java, Haskell, SQL, Ruby, Swift, Elm, CSS, Sass, HTML, Assembly

Frameworks, Libraries, and Tools: React.js, Node.js, Next.js, Redux, Angular.js, Flask, Express.js, JUnit Testing, Jest, Tailwind CSS, Bootstrap, OAuth0, Liveblocks, RESTful API, Spring Boot, Docker, Linux, UNIX, Vercel, Azure, GCP, Git, Postman, React Workflow, AWS, Jest, Zustand, MUI Library

Databases: MySQL, PostgreSQL, MongoDB, MSSQL, Redis, Oracle Database, DynamoDB

RECENT EXPERIENCE

MBA4HIRE | Full-Stack Developer

June 2024 - Present

- Built and deployed a full-stack financial platform using Next.js, React, Express.js, Vercel, and Azure SQL Database, featuring real-time routing, global state management with Zustand, and added secure authentication/authorization with Auth0 and JWTs.
- Created two AI-driven chatbots: one using Retrieval-Augmented Generation (RAG) with vectorized semantic search for contextual responses, and another that transforms natural language prompts into structured JSON tables and generates database schemas, cutting manual setup time and automating data workflows.
- Developed a Slack integration with full multi-workspace support that allows users to access the workspaces linked to their Slack account directly in-app, with persistent per-workspace state to eliminate redundant setup and reduce context switching.
- Implemented real-time UI features including drag-and-drop task workflows, live notifications, and dynamic data rehydration to improve responsiveness and interactivity.

SELECTED PROJECTS

Bracket Maker | Typescript, SQL, Zustand, Bootstrap | 🖸

July 2025 - September 2025

- Engineered a dynamic bracket-making platform with support for Round-Robin, Single-Elimination, and Double-Elimination formats, implementing custom logic for match scheduling, result propagation, and progression tracking across complex tournament trees.
- Used React, TypeScript, and Zustand to manage persistent application state, enabling seamless updates, bracket resets, and live reactivity as users cast votes or advance matchups.

- Collaborated on a spatial data research project with a McMaster Art History professor, mapping 19th-century French artists' residences and migration patterns using ArcGIS Pro, SQL, and Excel to analyze how geography and proximity to institutions shaped artistic networks.
- Organized and cleaned historical data from multiple sources into structured artist profiles; standardized locations and dates for accurate spatial mapping and analysis of how institutional proximity and urban expansion influenced artistic movement.

CERTIFICATIONS