# **Mohammad Abbas**

## Software Developer

#### **Profile**

Software Developer with 1+ years of experience building production-ready web apps. Published open-source npm libraries adopted by 1,000+ developers for modular, reusable solutions.

## **Professional Experience**

## **Frontend Developer**

04/2025 - Present | Remote

Vertext Partners

- Worked on **Places4Students**, a platform connecting students with off-campus housing options.
- Developed an interactive map interface and a dynamic user dashboard, improving navigation and user engagement.
- Focused on frontend development using **Next.js**, ensuring scalability and maintainability.
- Achieved excellent Lighthouse scores (90+ on both desktop and mobile) by optimizing performance, accessibility, and SEO.

## **Software Developer Volunteer**

08/2023 - present | Remote

Big Data Specialist community

- Led full-stack development of an in-progress programming course platform using Next.js, Spring Boot, and MySQL, partnering with the community owner to design scalable architecture and prioritize cross-platform usability.
- Migrated ReactJS to Next.js, improving page load speed by 30% and enabling SEO-friendly SSR/SSG workflows.
- Containerized the application with Docker and automated CI/CD pipelines using GitHub Actions, ensuring consistent environments and accelerating deployment cycles.
- **Built a search engine** (Spring Boot, MySQL) with advanced filters/pagination, reducing backend query time by **40%** and streamlining course discovery.
- Automated data scraping for 500+ courses/month using **Selenium/Java**, saving **15+ hours/month** of manual effort.

## **Full Stack Developer**

01/2025 - 04/2025 | Beirut

3E Tech

- Built a TypeScript-driven multi-step form for a property management system using React Hook Form + Zod.
- Built a full-stack LMS with **TypeScript, React, and Node.js,** implementing role-based access control and course enrollment.
- Designed **PostgreSQL** database schemas and leveraged **Prisma ORM** to **optimize query performance by 25%.**

#### **Software Developer**

05/2023 - 08/2023 | Hazmieh

Bracket Technologies

- Contributed to a team building a scalable flight/hotel booking platform using Bracket.
- **Developed a secure user registration system** with role-based access, enabling 500+ travel agents to onboard and manage bookings efficiently.
- Engineered a search engine with dynamic filters, reducing average search time for agents by 40%.

## **Projects**

#### Mo Programming Language

JavaScript, moo, nearley.js

- Engineered **Mo**, a custom programming language, using **moo** for lexical analysis and **nearley.js** for parsing, implementing a context-free grammar to optimize syntax validation and AST generation.
- Architected a **transpiler** to convert Mo source code into executable JavaScript, enabling seamless integration with existing JS ecosystems and eliminating runtime compatibility errors.

## **Open Source Contribution**

## **Rapid Express**

NodeJs, Express.js, TypeScript

- Engineered a globally-installed CLI tool to automate Express.js app scaffolding using TypeScript, enabling rapid generation of production-ready backend APIs with a single command
- Designed a scalable folder architecture with built-in decorators, and error-handling middleware, reducing initial setup time for developers by 70%.
- Implemented custom decorators (e.g., @Route, @Middleware) to simplify API routing and validation, cutting boilerplate code by 40% and accelerating feature development.
- Published on npm, achieving 1,200+ downloads.

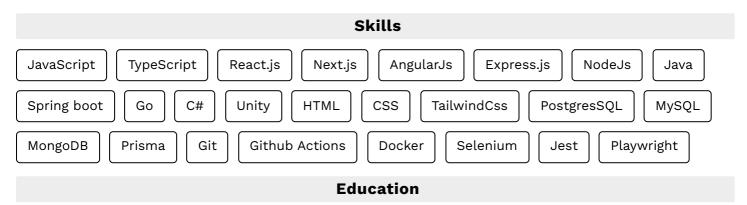
#### **React Image Component**

React.js, TypeScript

- Created react-img-component, a lightweight React library for performant image lazy loading, leveraging the Intersection Observer API.
- Implemented a user-customizable placeholders to improve perceived performance and reduce layout shifts.

#### **React CLI**

- Built a CLI tool in Go to scaffold React projects with optional flags for TypeScript, React Router, and Tailwind CSS.
- Enabled quick and consistent component generation through custom CLI commands.



**Bachelor in Management Information System** 

2021 - 2025

Lebanese university