Purav Jignesh Patel

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Authorized to work in the U.S. until May 2029 under F-1 OPT/STEM OPT.

TECHNICAL SKILLS

Core Technologies: .NET 9, ASP.NET Core, C#, EF Core, REST APIs, Azure AD, OAuth2/OIDC, JWT, Docker
Backend: ASP.NET Core, EF Core, LINQ, Async/Await, Dependency Injection, PostgreSQL, SQL Server, MongoDB
Frontend: React, TypeScript, Tailwind CSS, Axios
Cloud & DevOps: AWS (EC2, S3, Lambda, API Gateway, DynamoDB, RDS, CloudFront, IAM)
Architecture & Design: Clean Architecture, SOLID Principles, Repository Pattern
Programming Concepts: Object-Oriented Programming, Software Development, Problem Solving, Debugging

CERTIFICATIONS

AWS Certified Solutions Architect – Associate

PROFESSIONAL EXPERIENCE

University of Houston | Software Engineer (Instructional Assistant) | Houston, Texas, USA   **September 2024 - Present**

- Modernized a legacy **.NET Framework 4.7 WebForms** system to **.NET 9** and **ASP.NET Core**, reducing average page load times by **~40%** and eliminating long-standing performance bottlenecks.
- Migrated monolithic **WebForms (.aspx)** modules to a **React + TypeScript** single-page application integrated with **ASP.NET Core REST APIs**, improving UI responsiveness and reducing feature development time by **~30%**.
- Refactored authentication and authorization flows using **Azure AD**, **OAuth2/OIDC**, and **JWT**, reducing authentication-related production issues by **~25%** while strengthening role-based access controls.
- Designed and implemented a multi-role tutoring platform (**Admin, Tutor, Student, Staff**) using **ASP.NET Core**, **C#**, **EF Core**, **PostgreSQL**, **React**, and **TypeScript**, supporting **10,000+ students, tutors, and staff across the university**.
- Optimized **EF Core LINQ queries using indexing and pagination** while collaborating with another engineer to identify and **resolve performance bottlenecks**.

Skillmine Technologies Consulting Pvt. Ltd. | SWE Intern | Mumbai, Maharashtra, India   **December 2023 - April 2024**

- Built internal **React + TypeScript** web applications integrated with **REST APIs**, automating enterprise workflows and reducing manual processing time by **~20%**.
- Refactored authentication workflows using **SAML**, **OAuth2**, and **OIDC**, reducing authentication-related defects by **~25%** across frontend systems.
- Diagnosed and resolved critical production defects across frontend and backend services by collaborating with cross-functional teams, reducing service downtime by ~35%.

Meditab Software (India) Pvt. Ltd. | SWE Intern | Ahmedabad, Gujarat, India   **December 2022 - April 2023**

- Developed and enhanced healthcare workflow modules using **PowerBuilder** and **Sybase SQL**, reducing execution time of core workflows by **~15%**.
- Optimized **Sybase SQL** queries and database indexing, reducing execution time of critical reports and transactional operations by **~20–30%**.

PROJECTS

StockDaddy Backend | .NET 9, Clean Architecture, PostgreSQL   **October 2025 - Present**

- Architected a modular **.NET 9** backend using **ASP.NET Core**, **EF Core**, and **Clean Architecture**, enabling independent evolution of domain logic, infrastructure, and APIs while reducing coupling and improving long-term maintainability.
- Implemented a **multi-tenant inventory and operations system** using **ASP.NET Core**, **EF Core**, and **PostgreSQL**, designed to support tenant isolation, role-based access, and scalable onboarding of new organizations without schema changes.
- Wrote unit tests for service-layer business logic using **xUnit** and **Moq**, validating domain rules independently of infrastructure and reducing regression risk during feature expansion.

Full-Stack .NET Web API Project | .NET, C#, React.js, TypeScript, Axios, Entity Framework   **September 2024 - October 2024**

- Owned the architecture of a modular **.NET 9 backend** using **ASP.NET Core**, driving design decisions from requirements through testing.
- Built a **React + TypeScript** frontend integrated with backend services via **Axios**, ensuring consistent API consumption patterns and predictable client–server interactions.
- Developed a console-based diagnostic utility to trace API workflows and automate request validation, reducing manual debugging effort and improving developer productivity.

Video Streaming Platform | AWS, React.js, Axios, Tailwind CSS   **October 2023 - December 2024**

- Engineered an **event-driven video processing pipeline** using **AWS S3**, **Lambda**, **API Gateway**, **DynamoDB**, and **EventBridge**, enabling asynchronous transcoding and metadata generation without blocking user workflows.
- Implemented secure authentication using **AWS Cognito** and optimized content delivery through **CloudFront**, improving access control and reducing content delivery latency.
- Built a responsive **React** frontend using **Tailwind CSS** and **Axios**, improving load performance and overall user interaction across video management flows.

EDUCATION

Master of Science in Computer Science | Houston, Texas, USA   **May 2026**
University of Houston Main Campus

Bachelor of Technology in Computer Engineering | Anand, Gujarat, India   **May 2023**
Charotar University of Science and Technology | GPA: 3.80/4