Tuan Van Pham

Clearwater, FL, USA | (480) 877-9966 | tuanvanphm@gmail.com | Linkedin | Portfolio

Profile

A seasoned **Full Stack C# Developer** with over **10 years** of expertise in architecting robust, scalable web applications across diverse industries. Skilled in ASP.NET Core, Azure, Angular, React and complex third-party integrations, consistently delivering intuitive and performant digital solutions. Passionate about combining technical excellence with innovative problem-solving.

Skills & Abilities

Languages & Frameworks
C#, C/C++, SQL, Python, Java, JavaScript, TypeScript, ASP.NET Core, React, Angular, Blazor, Entity Framework Core

Web & API Technologies
RESTful APIs, gRPC, SignalR, Webhooks, JWT, OAuth2

Databases & Storage
SQL Server, PostgreSQL, Azure Cosmos DB, Redis, Azure Blob Storage

Cloud Platforms
Microsoft Azure (App Service, Azure Functions, AKS), AWS, Firebase

Third-Party Integrations
Stripe, Twilio, Zoom, SendGrid, Microsoft Graph API

DevOps & CI/CD
Docker, Kubernetes, GitHub Actions, Azure DevOps, Terraform

Authentication & Security
Azure Active Directory (AD/B2C), Firebase Authentication, JWT, OAuth 2.0, Azure Key Vault

Testing & Quality Assurance
xUnit, Jasmine, Karma, Playwright, Postman

Monitoring & Analytics
Azure Application Insights, Power BI Embedded, Grafana

Architecture & Design Patterns
Microservices, Domain-Driven Design (DDD), Clean Architecture, CQRS

Experience

Senior .Net Full Stack Developer | *HCLTech* | September 2021 – Present

AI-Driven Contract Analysis Platform **–** *Developed an advanced backend platform powered by AI and NLP technologies to automatically analyze, summarize, and flag potential legal risks in business contracts. It integrates with multiple third-party services and provides automated reporting and secure client portals.*

- Architected and led the backend development of an AI-powered contract analysis platform utilizing **ASP.NET Core Web API**, **Azure Cognitive Services**, and containerized microservices on **Azure Kubernetes Service (AKS)**.
- Integrated **Azure OpenAI Service (GPT models)** for extracting legal clauses, risks, and summaries from uploaded contracts.
- Built scalable document storage and indexing infrastructure using **Azure Blob Storage** and **Azure Cognitive Search**, enabling fast search and retrieval of contracts.
- Designed robust authentication and authorization layers with **Azure Active Directory B2C** and **JWT-based security** for secure, role-based client portal access.

- Managed database operations using **Entity Framework Core** with optimized schema designs on **Azure SQL Database**, ensuring high efficiency for complex querying and analytics.
- Implemented automated background processing of contracts and batch jobs using **Azure Functions** and event-driven triggers through **Azure Event Grid**.
- Developed RESTful APIs and gRPC endpoints, documented clearly with **Swagger/OpenAPI**, enabling easy integration with front-end web and mobile applications.
- Led **frontend development** using **Angular 17+**, creating responsive and intuitive user interfaces for contract upload, analysis, and reporting.
- Guided the frontend team in designing dynamic dashboards and visualizations, improving user experience through efficient data presentation and real-time updates.
- Integrated frontend components seamlessly with backend APIs, ensuring secure and performant data interactions.
- Integrated automated notification systems using **Twilio (SMS/email alerts)** and **SendGrid** to inform users when contract analyses are complete or flags emerge.
- Leveraged **Stripe API** for seamless client onboarding, subscription management, and payment processing within the platform.
- Configured real-time event logging, metrics, and observability using **Azure Application Insights** and dashboard visualization through **Grafana** and **Power BI Embedded**.
- Automated continuous integration and deployment pipelines through **GitHub Actions** and **Azure DevOps Pipelines**, facilitating rapid deployments and rollback capabilities.
- Containerized backend services using **Docker** with managed orchestration via **AKS**, ensuring resilience, scalability, and efficient resource utilization.
- Developed webhooks securely validated using **HMAC signatures**, enabling reliable communication with external services (e.g., **Slack**, **Teams notifications**).
- Enhanced caching mechanisms using **Redis Cache** to improve response times for frequent queries and reduce database load.
- Created extensive automated unit and integration testing coverage using **xUnit**, **Playwright**, and **Moq**, achieving high test coverage and maintaining software quality.
- Employed **Terraform** and **Azure Bicep** to implement Infrastructure as Code (IaC), providing reproducible environments and streamlined infrastructure management.
- Applied principles of **Clean Architecture** and **Domain-Driven Design (DDD)**, clearly separating business logic from infrastructure and application concerns.
- Managed data encryption and secure handling of sensitive contract data utilizing **Azure Key Vault**, maintaining compliance with regulatory requirements.
- Collaborated closely with legal domain experts to fine-tune AI model accuracy and ensure legal insights met industry standards and client expectations.
- Monitored and optimized system performance proactively, addressing scalability concerns and reducing operational costs via strategic cloud resource allocation.

Full Stack developer | *Cognizant* | June 2017 – August 2021

Healthcare Appointment & Record Management System **–** *Developed a cloud-native platform for hospitals and clinics to manage patient appointments, real-time availability, digital records, and third-party integrations like Zoom for telemedicine, Stripe for billing, and Azure AD for secure access control.*

- Architected and developed a **microservices-based** healthcare scheduling and records platform using **ASP.NET Core Web API** and **Azure Kubernetes Service (AKS)**.
- Implemented user roles (doctor, patient, admin) and secure login flows using **Azure AD B2C** with **OpenID Connect** and **JWT**.
- Created patient dashboards and appointment booking UI using **React** and **Material UI** for responsive design.
- Integrated **Microsoft Graph API** to sync doctors' Outlook calendars with appointment slots in real time.
- Built a **real-time chat and notification system** using **SignalR** and **Twilio Conversations API** for appointment reminders and doctor-patient messaging.
- Designed and managed relational data using **Entity Framework Core** with **PostgreSQL**, supporting audit trails for every update.
- Used **MongoDB** for storing unstructured medical notes, scanned documents, and visit history with full-text search.
- Integrated **Zoom API** for generating HIPAA-compliant telemedicine sessions and embedded video call links.
- Developed webhook handlers to process Stripe events such as completed payments, failed subscriptions, and invoicing via **Stripe .NET SDK**.

- Used **Azure Blob Storage** to store medical attachments, prescriptions, and lab results securely.
- Built **gRPC services** to handle internal communication between the booking engine, user service, and notification service.
- Enabled automatic generation of reports and health summaries using **Power BI Embedded** with data pulled from PostgreSQL and MongoDB.
- Implemented **role-based access control (RBAC)** policies at both API and frontend layers using **policy-based authorization** in ASP.NET Core.
- Used **Docker** and **Helm** charts to containerize and deploy services on **AKS**, supporting horizontal scaling and rollout strategies.
- Set up **Azure DevOps Pipelines** for continuous integration, deployment, and QA testing on multiple environments.
- Monitored logs and performance using **Azure Application Insights** and alerting rules for downtime or performance degradation.
- Utilized **Terraform** to automate provisioning of cloud infrastructure and secret management with **Azure Key Vault**.
- Conducted integration and E2E tests using **xUnit**, **Moq**, and **Playwright**, with test reports integrated into GitHub PR checks.
- Provided REST and gRPC client SDKs for third-party EMR (Electronic Medical Records) integration, documented using **Swagger/OpenAPI**.
- Followed **Clean Architecture** with dedicated layers for domain logic, application services, and external infrastructure.

Front-End Developer | *Globant* | Oct 2015 – May 2017

- Developed a responsive, dynamic web application frontend for the **EduBoard LMS** using **Angular 5** with **TypeScript**, enhancing user experience for students and teachers.
- Built modular UI components using **Angular Material** and custom SCSS styles to create consistent, intuitive user interfaces across the application.
- Implemented client-side routing with **Angular Router**, creating lazy-loaded modules to improve initial load performance and maintainability.
- Integrated robust form management and real-time validation using **Reactive Forms** to handle student registrations, assignment submissions, quizzes, and feedback forms.
- Leveraged **NgRx (Redux pattern)** for state management, handling complex state interactions across different modules such as user authentication, course progress, and notifications.
- Utilized **SignalR** to enable real-time interactions, such as live class updates, messaging, announcements, and progress tracking directly within Angular components.
- Designed and implemented an interactive assignment builder module allowing teachers to dynamically create quizzes, upload materials, and manage course content with ease.
- Integrated **Google Firebase Authentication** using Oauth providers (Google and Microsoft) to facilitate smooth single sign-on (SSO) experiences.
- Developed interactive dashboards using **Chart.js** and custom Angular components to visualize student performance metrics, engagement levels, and progress analytics.
- Implemented efficient data fetching strategies using **Angular HTTPClient**, with services structured to interact seamlessly with backend **ASP.NET Core Web APIs**.
- Improved application performance by optimizing frontend asset bundling using **Webpack** and Angular's built-in production build optimizations.
- Employed client-side caching and offline capabilities using browser local storage and session management, improving user experience and reducing server load.
- Built reusable shared components (navigation bars, sidebars, modals, and alerts) to maintain consistency and simplify future enhancements.
- Established robust error handling and global exception interceptors within Angular, providing users clear, actionable error messages and logging issues via **Azure Application Insights**.
- Integrated **Zoom API** to embed secure teleconferencing directly into Angular components, facilitating seamless online lessons.
- Collaborated closely with UX/UI designers, translating wireframes and prototypes into precise, accessible, and responsive Angular implementations.
- Developed comprehensive unit and integration tests for Angular components and services using **Jasmine** and **Karma**, ensuring stable releases.
- Created end-to-end (E2E) tests using **Cypress** and **Playwright**, validating critical user workflows such as course enrollment, quiz interactions, and assignment submission.

- Participated actively in code reviews, mentoring junior frontend developers, and maintaining high coding standards through continuous improvement practices.
- Automated CI/CD pipelines via **GitHub Actions** and **Azure DevOps** to deploy frontend assets seamlessly to Azure Static Web Apps, ensuring rapid deployment cycles and minimal downtime.

Education

Master's Degree in Computer Science | June 2015 | University of Hong Kong

Bachelor's Degree in Computer Science | June 2012 | Duy Tan University

Activities and Interests

Environmental conservation, basketball, hiking, travel