Nelson Samayoa | Software Engineer



www.**linkedin**.com/in/nelsonsamayoa | www.**github**.com/nel-sam
nel-sam.github.io/portfolio/
US citizen currently living in Madrid, Spain with authorization to work in Spain and US

Senior Full-Stack Software Engineer with 16+ years of experience designing and building scalable applications, developer platforms, and cloud-native systems. Expertise spans .NET, React, Angular, TypeScript, Azure, AWS, mobile development, and DevOps. Proven track record owning the full product lifecycle from architecture to production release, as well as leading engineering teams and test automation initiatives.

TECHNICAL SKILLS

Frontend: React, Angular, TypeScript, JavaScript, HTML/CSS, RxJS, Angular Material, Electron
Backend: .NET, .NET Core, C#, ASP.NET, REST APIs, GraphQL, Entity Framework, Node.js, Microservices
Databases: SQL Server, PostgreSQL
Mobile: React Native, Flutter, Ionic, iOS, Android
Cloud: Azure, AWS, Azure Functions, Azure Service Bus, Azure Active Directory, Blob Storage, Serverless, Event-Driven Architecture
Messaging: RabbitMQ
AI: Azure OpenAI, Azure Speech, Google Gemini API, LLM Integration
Security & Identity: OpenID Connect, OAuth, API Authentication
DevOps: CI/CD, Azure DevOps, TFS, PowerShell, Docker
Testing & Quality: Test Automation, Selenium, SpecFlow, Maestro, CodedUI, Load and Security Testing
Practices: Agile/Scrum, Jira, Git, Technical Leadership, Mentoring, System Architecture

LANGUAGES

English (native) | Spanish (native) | Japanese (fluent) | French (fluent)

WORK EXPERIENCE

Software Engineer | Entacit LLC

Remote *Apr 2022 - Present*
Full-stack developer delivering web, mobile, and desktop applications for an education platform using React Native, Angular, Electron, and .NET Core.

- **Mobile:** Core developer on a React Native (TypeScript) app from inception, building content management UI, QR code connections, email deep links, and dev/staging/prod iOS build pipelines. Led multiple major React Native upgrades, a full UI/UX redesign, the forced-update flow, parent/teacher/manager views, and cross-platform media playback fixes. Wrote Maestro UI smoke tests.
- **Desktop:** Owned the Electron (React + Node.js) app that lets teachers present course content safely via deep links or drag and drop. Added tabs, reliable image rendering, dependency upgrades, and handling of unsupported file types and external links.
- **Web:** Gathered requirements directly from the customer and built major Angular features, including QR code generation, CSV upload and generation, and video-recorded student tests and device testing. Also built quality evaluation reports, handled Angular upgrades and Azure DevOps build and

release pipelines.

- **AI:** Built an English-learning chatbot with Azure OpenAI and Speech APIs, prototyped with Google Gemini and Rive animations, and developed a pronunciation component with recording-loss prevention and resume handling.
- **Backend:** Built C# .NET Core, Entity Framework, and SQL Server REST APIs for a student rewards system, bulk operations, custom fields with CSV import/export, course cloning, timezone-aware email notifications, password and account recovery flows, and a student/parent account-deletion flow supporting data-protection compliance. Used Docker to host services such as SQL Server locally.

Software Engineer | Imagine Learning

Remote *May 2021 - Mar 2022*

Full-stack engineer on an LMS platform, working in C#, React, TypeScript, AWS, and PostgreSQL.

- **Web & Performance:** Built a highly customized React progress-reporting tool with complex data visualizations that let managers track employee training progress. Contributed frontend and backend optimizations to a platform-wide performance initiative.
- **Cloud & Distributed Systems:** Owned the design and implementation of AWS event-driven systems for processing student and application events, enabling asynchronous processing between platform components.

Software Engineer | Paylocity

Remote *Mar 2020 - May 2021*

Full-stack engineer on the Learning module of Paylocity's LMS platform, working across React, Angular, Ionic, .NET, RabbitMQ, SQL Server, and AWS, and contributing to architecture decisions.

- **Web & Mobile:** Built user-facing features in React and Angular for the LMS, and developed Ionic (Angular) mobile features including course catalog browsing, search, and multi-criteria filtering to improve course discovery.
- **Distributed Systems:** Implemented RabbitMQ background services and work processors that replaced API-bound processing, removing a scalability bottleneck and improving throughput as demand grew.
- **Architecture:** Authored architecture documentation for a cross-platform learning solution spanning React and Angular/Ionic clients, C#/.NET APIs, SQL Server, RabbitMQ, and AWS storage.

Software Engineer | DriveTime

Tempe, AZ *May 2018 - Feb 2020*

Full-stack engineer on customer-facing web and mobile applications, public APIs, and event-driven Azure solutions for DriveTime.com and Bridgecrest.com.

- **Web & Mobile:** Built features in Angular, TypeScript, C#, and .NET, introduced Angular Material, and set UI/UX, performance, and code-quality standards. Delivered the public credit request wizard, giving customers an instant answer on their ability to buy a car instead of waiting on a separate financial institution. Developed Ionic (Angular) mobile apps from requirements gathered directly from end users, and maintained legacy jQuery and KnockoutJS systems during modernization.
- **API & Backend:** Helped design and build a public GraphQL API in C#/.NET for external consumers,

developed proofs of concept, and implemented its authentication model. Also built REST services for customer-facing applications.

- **Cloud & Event-Driven Systems:** Architected Azure solutions using Azure Functions, Service Bus, Queues, Topics, and Blob Storage for automated vehicle-image processing and vehicle-value analysis. Built an Azure pipeline processing ~5,000 vehicles per day for automated vehicle-image processing and vehicle-value analysis, replacing a semi-manual process based on less accurate data and saving cost and employee time. Better stock acquisition pricing increased revenue.
- **Identity & Security:** Led the migration of legacy products to Azure Active Directory authentication using OpenID Connect, and contributed to the authentication architecture for externally consumed APIs.

Software Development Engineer in Test (SDET) Team Lead | iPro Tech

Tempe, AZ *Jan 2017 - Mar 2018*

- **Team Leadership & Strategy:** Led the automation team through sprint planning and delivery in Agile/Scrum using Jira. Directed the migration from the deprecated Microsoft CodedUI framework to SpecFlow BDD and White UI Automation, reducing tooling and maintenance costs. Built a company-wide dashboard showing test suite health across products and teams.
- **Framework Development:** Designed core features of a C# test automation platform, including Entity Framework-backed result logging, reporting, asynchronous multi-browser execution, and distributed test execution across multiple agents.
- **Internal Tools:** Built support and reporting applications in C#, WinForms, JavaScript, and Team Services APIs, including a multithreaded diagnostic utility for troubleshooting customer environments and a Google Charts dashboard of test health metrics from TFS data.
- **DevOps:** Managed build and test infrastructure with TFS and PowerShell, supporting continuous validation across multiple development teams.

Software Engineer & SDET Team Lead | Dell Inc

Remote *Jul 2012 - Jan 2017*

- **Application Development:** Built and maintained internal and customer-facing applications in C#, WinForms, ASP.NET, IIS, and Windows Services. Created a command-line utility that automated diagnostic data collection from Windows, SQL Server, and Active Directory environments, reducing support costs and improving customer satisfaction. Supported a WinForms reporting application through its sunset, including knowledge transfer to the new owners.
- **Customer Engineering:** Served as a principal technical contact for major customers such as Disney, gathering requirements, debugging issues, and leading product and code training sessions during a change of ownership.
- **Test Automation Leadership:** Led five engineers on sprint planning, delivery, and stakeholder reporting in Azure DevOps (VSTS). Expanded automated testing across product teams, covering UI, API, load, and security testing.
- **Training & DevOps:** Mentored developers and testers on CodedUI, Selenium, API automation, performance testing, and penetration testing. Owned the CI/CD systems, build servers, PowerShell automation, TFS/VSTS integrations, and Azure VM test environments for multiple product teams.

Software Engineer Intern | Intel Corporation

Hillsboro, OR *Sep 2010 - Jul 2012*

- **Developer Tools:** Built and maintained an internal IDE for developing and debugging automated tests, including processing of XML files larger than available RAM, persistent breakpoint storage, and JavaScript syntax highlighting and autocomplete.
- **Test Automation Infrastructure:** Developed framework plugins for Linux SSH command execution, Wake-on-LAN, battery-state monitoring via WMI, and automated Cisco access point testing.
- **Web & Testing:** Built an ASP.NET (Razor) web interface for remotely managing automation runs and environments. Developed and maintained automated test suites for Bluetooth-enabled devices.

EDUCATION

Bachelor of Science in Computer Science Oregon State University 2019
Bachelor of Arts in Spanish Portland State University 2006

PERSONAL PROJECTS

Language Learning Mobile Applications in Flutter

- Designed, built, and published three cross-platform grammar-learning apps for Japanese, Korean, and Serbo-Croatian on the Apple App Store and Google Play.
- Owned product direction, UI/UX strategy, and the full lifecycle from requirements to store releases and user feedback, working with a designer and mentoring a junior developer.
- Used a lightweight offline-first architecture with no backend dependency, keeping the apps fast and simple to maintain.