

Greg Albanese

Senior Software Engineer • Platform Engineering

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PROFESSIONAL SUMMARY

Senior Software Engineer with 10+ years building enterprise platforms in regulated environments, with deep experience in C#/.NET development and architecting AI-agent governance into enterprise developer platforms. Architected OneIDP's Model Context Protocol (MCP) integration, a governed entry point that lets AI coding agents provision infrastructure under the same RBAC, approval-gate, and security controls as human developers. Led development of Project Triangle, a C#/.NET data synchronization platform integrating HR and enterprise systems for tens of thousands of employees. Experience spans AI-assisted development workflows, enterprise authentication and authorization, and a strong frontend foundation in React and TypeScript.

TECHNICAL SKILLS

AI & Agentic Development: LLM Integration (Anthropic Claude API, OpenAI API), Model Context Protocol (MCP) server & agent infrastructure, AI-assisted development (GitHub Copilot, Claude for VS Code), exploratory experience with agent configuration frameworks

Backend Development: C#, .NET / ASP.NET (MVC, Web API), NodeJS, Express, Entity Framework, SQL Server / T-SQL, Postgres, dependency injection, async/await, worker & background service design, enterprise RBAC / approval-gated authorization, OAuth-compliant API integration, Temporal workflow orchestration, SignalR real-time integration

Frontend Development: React, TypeScript, Angular, Backstage, Material UI, reusable component & shared package design, application scaffolding/starter templates, developer experience (DX) tooling

Infrastructure & DevOps: AWS, Firebase, Kubernetes, Helm, Docker, CI/CD, Azure DevOps, Git (branching, merging, pull requests, code review workflows)

PROFESSIONAL EXPERIENCE

Senior Software Engineer, Solutions Team • Omnicom • Jersey City, NJ

Jan 2024 – Present

OneIDP: Internal Developer Platform

- Lead platform developer for OneIDP, Omnicom's enterprise Internal Developer Platform, building shared UI components, application scaffolding, and reusable frontend foundations on Backstage, React, TypeScript, Express, and Material UI, adopted for self-service infrastructure provisioning across all Omnicom agencies worldwide.
- Extended OneIDP as a governed entry point for AI coding agents via the Model Context Protocol (MCP), applying the same authentication, RBAC, approval-gate, and security controls used by human developers to AI-triggered requests. This demonstrates the reusability of the platform's shared auth and access-control foundations.
- Built the administration UI for OneIDP's RBAC system, including multi-step role creation and editing, conditional access policies with nested AND/OR logic, and allow/deny permission policy assignment across the platform.
- Integrated Temporal workflows to route infrastructure requests through governed, RBAC-based management approvals before any resource is deployed, replacing ad hoc email/ticket approvals with a durable, auditable frontend-to-backend workflow with automatic retries and failure recovery.
- Designed a deny-by-default rendering pattern using async permission-check hooks to prevent unauthorized catalog data from ever reaching the screen, replacing Backstage's default components with permission-checked versions that verify access before rendering any protected links.
- Architected a React Context and Provider system for multi-tenant scoping across the platform, exposing custom hooks so consumers never call useContext directly, and reused the same shared-state pattern to manage dialog and permission state across the RBAC administration UI.
- Partner directly with engineering and operations stakeholders across Omnicom agencies to gather requirements, validate workflows, and translate organizational standards into self-service golden path experiences that replace weeks-long ticket-based requests, targeting sub-hour provisioning and 80%+ of all Omnicom builds through OneIDP.

Project Triangle: Enterprise HR Data Sync Platform

- Led development of a .NET / C# data synchronization platform maintaining real-time consistency of employee records across Reach, Workday, and Microsoft Dynamics 365 for tens of thousands of employees, using a hybrid batch and event-driven architecture.
- Engineered a snapshot-based change detection system using EF to read and model employee records from the source HR system, comparing profiles against D365 to identify delta changes (title updates, approver reassignments, etc.) and propagating only the differences through dependency-injected, async services, minimizing API load and ensuring data fidelity.

- Eliminated thousands of help desk tickets by automating up to hundreds of HR record changes per day that previously required manual intervention, freeing operations staff and reducing resolution time from days to near real-time.
- Used LINQ extensively to transform and reconcile employee records between the source HR system and D365, and validated the sync and change-detection logic with a dedicated suite of unit tests using NUnit.
- Improved database performance for the sync pipeline by tuning indexes on frequently queried columns, refining table relationships to reduce redundant joins, and optimizing EF queries (avoiding N+1 patterns, using eager loading where appropriate) to reduce query overhead and speed up sync cycles.
- Built PT Dashboard, an Angular application backed by a C#/.NET API, giving business stakeholders a self-service interface to view and manage Project Triangle's configuration, reducing the volume of engineering tickets previously required for routine configuration changes.

Software Engineer • BBDO Worldwide • New York, NY

Oct 2016 – Dec 2023

- Led design and development of eCash, a treasury management system (Angular, .NET Web API, Node.js, SQL) built for Omnicom Finance that generates bank transfer instruction files for institutions like JPMorgan, driving an 85% increase in daily active users and API call volume.
- Partnered directly with Omnicom Finance stakeholders to gather requirements and built, from the ground up, the FX and transfer logic powering eCash. This included support for cross-currency transfers, intra-currency transfers between accounts, and third-party transfers outside the Omnicom network, applying daily spot foreign exchange rates and currency hedging before generating final payment files.
- Designed and delivered a billing request application for all BBDO agencies using ReactJS, TypeScript, and .NET Web API, following MVC and repository design patterns for maintainable, testable, and scalable request processing.
- Built a secure OAuth-compliant API and reduced client-facing latency by 40–50% by integrating SignalR for real-time bi-directional client/server communication.
- Drove TDD adoption, increasing application code coverage to 90% using NUnit and Moq, and established CI/CD pipelines via Azure DevOps, improving deployment time and bug-detection cadence across weekly sprint cycles.

IT Developer II • New York Community Bancorp (NYCB) • Commack, NY

Jan 2016 – Oct 2016

- Spearheaded migration from a legacy ASP application to a modern .NET MVC architecture, delivering a more responsive and maintainable platform, and supported NYCB's transition from waterfall to agile methodology.
- Designed custom timesheet reporting using advanced SQL (CTEs, stored procedures, joins, views) to meet complex business reporting requirements.

Software Engineer • Schultheis & Panettieri, LLP • Hauppauge, NY

Nov 2014 – Jan 2016

- Served as lead architect and developer for a Swift mobile app enabling staff to manage time-off requests, expenses, and timesheets; developed front-end web applications using jQuery AJAX with .NET Web API, following MVC patterns.
- Mentored company interns in JavaScript, the MVC lifecycle, and .NET Web API best practices.

Software Developer • SITA • Bohemia, NY

Sep 2013 – Nov 2014

- Rebuilt and modernized the Certification web application using JavaScript, jQuery, HTML, and PHP; refactored the back-end database interface using Apache and MySQL, improving system stability and code maintainability.

EDUCATION

University at Buffalo • Bachelors in Computer Science • May 2013