

MICHAEL PELLEGRIN Denver, Colorado | linkedin.com/in/michael-pellegrin-48270810

Full-Stack Cloud Architect & AI-Accelerated Development Consultant .NET | Azure | Distributed Systems | 17 Years

SUMMARY

Independent consultant specializing in Azure cloud-native systems, full-stack .NET development, and AI-augmented engineering workflows. 17 years building distributed platforms, secure APIs, event-driven architectures, and web and mobile front ends, with a recent track record of using multi-agent AI orchestration to compress delivery timelines by 80%. I work embedded with engineering teams or as a full delivery partner, from system analysis through production code, bringing AI-accelerated workflows that compress weeks of work into days.

WHAT I DELIVER

- **Cloud-Native Development** — Full-stack .NET Core microservices on Azure (Event Hubs, CosmosDB, API Management, Key Vault). Design, build, deploy.
- **Monolith Decomposition** — Strategic extraction of legacy systems into event-driven microservices with validated API contracts and full test coverage.
- **AI-Accelerated Engineering** — Multi-agent orchestration workflows (Claude Code, LLM tooling) that dramatically compress complex development timelines.
- **Architecture & Technical Strategy** — C4 modeling, system design, security architecture (OAuth2, OIDC, JWT, Azure AD), and technical roadmaps.
- **Team Enablement** — Mentorship, standards-setting, and knowledge transfer to elevate internal engineering teams during and after engagements.

SELECTED ENGAGEMENTS

Staff Engineer / Cloud Architect — Allegion US Jan 2020 – Feb 2026 | Golden, CO

Progressed from senior engineer to staff-level technical leader across Allegion's mobile credential and cloud platform initiatives. Operated as the de facto architect for secure credential delivery, partnering directly with Google and Apple engineering teams.

- Built a multi-agent AI orchestration system (Claude Code) that extracted 14 production endpoints from a monolith into a containerized microservice in 8 days — an 80% reduction versus the 6+ week manual estimate — with full test coverage and 1:1 API contract validation.

- Architected and built Azure-based APIs for enterprise mobile credential delivery, integrating BLE, NFC, and digital wallet platforms (Apple Wallet, Google Wallet).
- Decomposed critical legacy monoliths into event-driven microservices on Azure Event Hubs, improving scalability and system reliability across multiple product lines.
- Led a cross-functional team of five engineers; mentored developers from junior through senior-lead level in distributed architecture, API security, and DevOps automation.
- Defined Allegion's next-generation mobile credential architecture, balancing security, scalability, and reliability for enterprise-scale deployments.
- Authored C4 diagrams, technical roadmaps, and architectural artifacts to align cross-team strategy and reduce ambiguity.

Consultant / Lead Developer — Wax Robots (Independent Practice) Jul 2016 – Jan 2020

Delivered custom software solutions directly to clients as an independent consultant. Full lifecycle: requirements through deployment.

- Designed and built scalable RESTful APIs and cross-platform web applications (.NET, Angular).
- Established CI/CD pipelines and DevOps practices for client teams.
- Collaborated directly with clients to define technical requirements and translate business needs into working systems.

Architect / Lead Developer — Community Systems Sep 2016 – May 2018

- Designed distributed microservices for inventory management and reporting systems.
- Built cross-platform mobile applications and mentored developers in OOP design, testing, and automation.

Software Engineer — Huron (Contract) Sep 2019 – Jan 2020

- Implemented user authentication via IdentityServer4 and developed OIDC authentication for single-page applications.

TECHNICAL SKILLS

- **Languages & Frameworks:** C#, .NET Core/.NET Framework, REST APIs, JavaScript/Angular, Swift
- **Azure Platform:** Event Hubs, API Management, CosmosDB, Key Vault, Azure AD, Azure DevOps
- **Architecture:** Distributed Systems, Event-Driven Architecture, Microservices, C4 Modeling, Secure API Design (OAuth2, OIDC, JWT)
- **AI & Automation:** Multi-agent orchestration (Claude Code), LLM-augmented development workflows, prompt engineering
- **DevOps:** Terraform, CI/CD pipelines, containerization, infrastructure as code

EDUCATION

M.S., Telecommunications — University of Louisiana at Lafayette, 2003–2004 B.F.A., Digital Art & Animation — University of Louisiana at Lafayette, 2000–2003