CASEY SPAULDING

Full-Stack .NET Engineer & AI Solutions Architect | Agentic AI, RAG & Enterprise Integration

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Professional Summary

Full-stack .NET engineer with seven years of software development and hands-on architecture ownership across federal modernization, fintech, and a production AI SaaS platform. Designed and shipped agentic AI systems end to end: multi-step tool orchestration, a 46+ tool MCP server with scoped permissions, RAG with pgvector, model routing for cost and accuracy, and human-in-the-loop approval gates. Works in Microsoft-centric environments (.NET, Azure, SQL Server) in regulated settings, translating business workflows into scalable AI-enabled solutions and mentoring engineers on standards.

Technical Skills

- **AI Architecture:** Agent orchestration, agentic workflows, tool calling, MCP, RAG, embeddings (Voyage AI), vector search (pgvector), prompt engineering, model routing, evaluation, human-in-the-loop, Semantic Kernel, Claude API, Claude Code, Codex
- **Backend & Scripting:** C#, Python (scripting & automation), ASP.NET Core, .NET 8/10, Minimal APIs, REST, Entity Framework Core, Dapper, Hangfire, Roslyn analyzers
- **Data:** SQL Server, PostgreSQL, Azure SQL, data extraction and preprocessing pipelines, OCR
- **Front End & Mobile:** Angular, React, React Native (Expo), Next.js, TypeScript, Blazor
- **Cloud & DevOps:** Azure, AWS (Lambda, Cognito, S3), Cloudflare, Docker, Linux, CI/CD, monitoring
- **Security & Governance:** Multi-tenant isolation, least-privilege tool scopes, database role separation, vulnerability scanning (OSV-Scanner, Nuclei, CISA KEV), federal eAuth

Professional Experience

Founder & AI Solutions Architect | DocJacket | Apr 2025–Present

- Architected and shipped a multi-tenant .NET / PostgreSQL AI transaction-management SaaS platform with Angular web, React Native (Expo) mobile, and Next.js clients; own architecture, operations, and production support.
- Built multi-step agentic workflows with bounded tool-calling loops, external validation, explicit stop conditions, and human approval gates before any side-effecting action.
- Designed and launched an MCP server exposing 46+ tools across read, draft, and action scopes, with tenant isolation enforced at the SQL layer.
- Built LLM document extraction with model routing (Claude Sonnet default, Opus escalation for complex or low-confidence fields), improving accuracy at about 1.1× baseline cost.
- Implemented RAG with pgvector and Voyage AI embeddings behind a provider abstraction, replacing Azure Cognitive Search.
- Reduced per-document processing cost about 85% with PDF text extraction plus Azure OCR, and cut LLM token usage 30–40% through preprocessing.

- Led migration from Azure to Hetzner and Cloudflare, reducing infrastructure cost from about $3,100/month to under $100/month.
- Built an agent orchestration control plane with a nightly log-triage pipeline, isolated runners, and a run ledger; enforced conventions with custom Roslyn analyzers and a 140+ test acceptance suite.
- Hardened security: database role separation, isolated CI runner, scoped deploy keys, and continuous vulnerability monitoring.

.NET Full Stack Engineer | Priority One Financial Services | Feb 2026–Present

- Modernize financial-services applications for RV and marine dealer and customer portals using .NET Minimal APIs, Angular, and service-based integrations in a regulated environment.
- Contribute to integrating a third-party lending platform into dealer and customer portals.
- Introduced repository documentation standards and a company-wide wiki for documenting processes across departments.

.NET Full Stack Engineer | Accenture Federal Services (USDA) | Dec 2023–Feb 2026

- Delivered client-facing modernization for USDA farmers.gov, rewriting legacy WebForms into Angular and .NET 8 APIs hosted on AWS Lambda.
- Integrated AWS Cognito with federal eAuth; improved application performance 25% and reduced AWS costs through caching.
- Mentored four developers, conducted 20+ code reviews per month, and contributed to a reported 30% reduction in defects.
- Produced 15+ architecture diagrams for technical and client stakeholders and delivered 10+ high-priority features ahead of schedule in a SAFe Agile environment.

.NET Full Stack Developer | BlueJackett Systems (Consulting) | Apr 2019–Dec 2023

- Scoped and delivered client applications and REST APIs using C#/.NET, Blazor, Angular, and Azure; owned requirements through deployment and support.

Leadership

- **Chief Petty Officer (Ret.) | U.S. Navy | 1998–2019:** Led regional recruiting operations and training for 50+ personnel.
- **NJROTC Instructor & CyberPatriot Coach | San Diego Unified School District | 2019–2021**

Education & Credentials

- M.S., Computer Science (AI & Machine Learning), Western Governors University (2025)
- B.S., Software Engineering, Western Governors University (2024)
- B.S., Business, Marylhurst University (2010)
- AWS Certified Machine Learning – Specialty · AWS Certified AI Practitioner
- Active Secret Clearance · Public Trust