

Frank Avery

Staff Software Engineer · Full-Stack .NET & Web · DevOps & Cloud

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PROFESSIONAL SUMMARY

Versatile full-stack engineer with 25+ years building and shipping web applications across the entire stack — from React/Next.js frontends and .NET APIs to Azure cloud infrastructure and GitHub Actions CI/CD pipelines. Equally comfortable writing production code and improving the systems that deliver it. Track record of modernizing legacy platforms, enforcing code quality, and building observable, well-tested systems. Brings optional team-lead capability without requiring a management-track role.

TECHNICAL SKILLS

Languages & Frameworks	C# / .NET 8, TypeScript, JavaScript, PHP, Java, React, Next.js, Razor, SQL
Frontend	React, Next.js, Tailwind CSS, SCSS, Vanilla JS / jQuery, HTML5
Backend & APIs	.NET Web API, REST, Azure Functions, App Services, IIS, Windows Server
Data	SQL Server, T-SQL, query optimization, schema design
DevOps & CI/CD	GitHub Actions (Ubuntu + self-hosted Windows runners), Docker, SonarQube, Cypress
Observability	Prometheus, Grafana, custom metrics dashboards, API & SQL monitoring
Cloud & Auth	Azure, Azure Entra ID, Microsoft Graph API, AWS (EC2, RDS, S3, hybrid)
Tooling	Visual Studio, VS Code, Git, Keeper Secrets Manager, NuGet, npm

EXPERIENCE

Staff Software Engineer / Manager of Application Development

Great Expressions Dental Centers · Southfield, MI · 2021–Present

- Architect and deliver full-stack web applications using Next.js, React, TypeScript, and .NET 8 Web APIs hosted on Azure App Services and IIS.
- Built and maintain GitHub Actions CI/CD pipelines for versioned deployments across Ubuntu and self-hosted Windows runners, including automated packaging, robocopy-based IIS switching, and app pool lifecycle management.
- Implemented Cypress end-to-end test automation integrated into CI pipelines via Cypress Cloud, with Keeper Secrets Manager for secure credential injection.
- Stood up Prometheus/Grafana observability stack monitoring APIs, SQL Server, and custom operational KPIs — replacing ad-hoc alerting with structured dashboards.
- Enforced code quality gates via SonarQube integrated into pull request pipelines across multiple .NET and frontend repositories.
- Led migration from Windows Authentication to Azure Entra ID with Microsoft Graph API enrichment across enterprise web applications.
- Modernized .NET Framework applications to .NET 8, improving reliability, test coverage, and long-term maintainability.
- Championed org-wide adoption of GitHub and GitHub Copilot — migrating source control, establishing PR workflows and branch standards, managing Copilot license procurement, and driving developer onboarding to AI-assisted workflows.

Team Leader — Cloud Engineering & Reliability

Rocket Mortgage (Quicken Loans) · Detroit, MI · 2015–2021

- Led cloud engineering and on-call reliability teams supporting high-availability, high-traffic web systems.
- Migrated major applications into AWS and hybrid environments (EC2, RDS, S3, CloudFront).
- Improved system performance through database tuning, structured logging, and monitoring enhancements.

- Delivered DevOps and AWS training to engineering teams; supported major production deployments and incident response workflows.

Earlier Experience

Barracuda Networks — Portal Engineer & Technical Support · Radford University — Media Department Manager

PERSONAL PROJECTS

Archives of Dust — iOS Idle Game

Independent · [App Store](#) · 2025–Present

- Solo-developed a cozy sci-fi idle game for iOS/iPadOS using AI-assisted toolsets end-to-end; shipped via Xcode/TestFlight with AdMob monetization and in-app purchases.

MakerSigma — Web Publication

Independent · [makersigma.com](#) · Ongoing

- AI-assisted content and production website, monetized via Google AdSense; handles DNS, CDN (CloudFront), and full infrastructure independently.

EDUCATION & CERTIFICATIONS

- BS, Web Design & Communications — Radford University
- AWS Solutions Architect Associate
- Azure Administrator Associate (AZ-104)
- SAFe DevOps Engineer
- SAFe Product Owner / Scrum Master