

PATRICK CORKUM JR.

SOFTWARE DEVELOPER | FULL-STACK, AI INTEGRATIONS & CLOUD

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PROFESSIONAL SUMMARY

Software developer with 3+ years of experience building full-stack web applications, AI integrations, and cloud infrastructure. Delivers production solutions with C#, .NET, Angular, TypeScript, SQL Server, and Azure—from MCP-powered analytics and legal document review to hybrid identity, networking, and cloud migration. Combines application development with hands-on IT operations to solve problems across the full system.

TECHNICAL SKILLS

Languages: C#, TypeScript, Python, JavaScript, SQL

Application Development: .NET, Angular, REST APIs, systems integration

Cloud & DevOps: Microsoft Azure, Azure Functions, Application Gateway, CDN, Azure DNS, Docker, Git, k3s; AWS and Oracle Cloud exposure

Data & AI: SQL Server, Looker, Qdrant, Model Context Protocol (MCP), Azure AI Foundry, PyTorch, vector databases, Veo API

Infrastructure: Active Directory, Microsoft Entra ID, Group Policy, RADIUS, VLANs, DNS, Exchange

PROFESSIONAL EXPERIENCE

PerryLabs | Software Developer | Feb 2025–Present

- Designed and implemented MCP integrations connecting Looker and SQL Server, enabling AI-driven analytics workflows across business data.
- Built an Angular frontend for an AI-powered document review platform that analyzes and scores legal filings.
- Developed live integrations for a locally hosted Sage environment, bridging on-premises business systems with modern application workflows.
- Automated personalized holiday video generation through the Veo API, reducing manual production work and supporting repeatable client delivery.

Travel Advantage Network | Software Developer / IT Administrator | Dec 2022–Mar 2024

- Migrated 95% of on-site servers to cloud-based solutions, substantially reducing dependence on local infrastructure.
- Implemented Azure Application Gateway, CDN profiles, and Azure DNS to improve website delivery and traffic management.
- Automated TLS certificate renewal with Let's Encrypt, Certbot, and Azure Functions, replacing recurring manual renewal tasks.
- Built internal tools in Python and C# and developed Angular/TypeScript applications for managing resort unit availability.
- Administered hybrid Active Directory and Microsoft Entra ID, office Wi-Fi with RADIUS authentication, VLANs, DNS, and local networking.
- Delivered hands-on help desk support for infrastructure, access, and end-user issues.

Onsite Computers | IT Technician | Mar 2024–Jun 2024

- Diagnosed and repaired Windows laptops and desktops for residential and business customers.
- Managed residential and corporate network infrastructure and supported email migrations to Microsoft Exchange.
- Consulted on cloud and web-development solutions, translating customer requirements into practical recommendations.

Adoption Wise | Virtual Assistant | Dec 2019–Mar 2021

- Produced and edited the Adoption Wise Podcast and supported its end-to-end publishing workflow.
- Managed large email lists, scheduled campaigns, administered Facebook community access, and validated memberships.

INDEPENDENT PROJECTS & TECHNICAL INTERESTS

- Experiments with local AI models and self-hosted projects, including edge video-monitoring prototypes and other practical home-lab builds.
- Operates and maintains a personal 3D printer, using hands-on iteration to explore digital fabrication and hardware troubleshooting.
- Continuously researches emerging AI tools, computer hardware, and developer technologies, then evaluates them through hands-on experimentation.

EDUCATION

University of Maryland, Baltimore County (UMBC) | Bachelor of Science in Computer Science | May 2025