James Burch

Senior Software Engineer & Tech Lead · AI Agent Engineering

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SUMMARY

Senior software engineer and tech lead who designs AI agent tooling for engineering teams. Designed and built a GitHub Copilot agent system (custom agents, skills, guardrail instructions and scripts) that the team uses day to day for code review, delivery and production triage. Tech lead on Charles Schwab's advisor money-movement platform, with nearly six years shipping regulated fintech APIs in C#/.NET and Angular.

EXPERIENCE

Charles Schwab · Senior Software Engineer, Tech Lead Lone Tree, CO · Jan 2021 – Present

Advisor money-movement platform: the APIs and tools financial advisors and outside firms use to move client cash and securities.

AI-driven engineering

- Built an agent system on GitHub Copilot for the team's multi-repo .NET and Angular codebase, turning recurring engineering work into custom agents, skills, instruction files and scripts the team uses day to day.
- **Review:** a code-review agent checks C# and Angular changes against team checklists; a team-review agent prepares review notes for every open pull request; primary code reviewer across the team's repos.
- **Delivery:** a story-delivery agent takes a Jira story or bug end to end across repos, from reading the ticket to code, tests, pull request and QA handoff.
- **Production triage:** an agent turns a single correlation ID into a Splunk trace and root cause across services; a regression skill finds the change that introduced a defect in any repo.
- **Context engineering:** per-service context docs, durable repo memory and onboarding skills give agents, and new engineers, an accurate map of each system.
- **Guardrails:** security rules based on the OWASP Top 10 for .NET and web, human approval before any irreversible action, dependency preflight checks and rules for generated code.
- **Everyday workflow:** agents and scripts for cross-repo standup digests, pre-push checks, flaky-test detection, merge conflicts, API test requests, governance tickets, Confluence docs in plain technical English, and a year-end evidence report compiled from Jira, GitHub and Confluence.

Platform and leadership

- Tech lead (acting in 2025, formally since Nov 2025): lead delivery of third-party APIs for several types of money movement, built for partner and future agent (MCP) use; unblocked external client integrations.
- Set up performance engineering with Splunk monitoring and before/after automated tests; own API contract governance (OpenAPI, service registry, gateway tokens).
- Modernized a core application from SOAP to REST and built a new transfer capability for advisors, both with team recognition awards; shipped firm-configurable approval rules that retired a legacy interface.

SKILLS

- **AI engineering:** agent design, GitHub Copilot custom agents, skills and instructions, context engineering, prompt engineering, agent guardrails, MCP-ready APIs
- **Languages and frameworks:** C#, .NET, ASP.NET Core, Entity Framework, TypeScript, Angular, Python, PowerShell, SQL
- **Platform:** REST and OpenAPI, microservices, Apache Kafka, SQL Server, MongoDB, Splunk, API gateway, GitHub, CI/CD, xUnit

EDUCATION AND RECOGNITION

- **B.S. Computer Science**, Colorado Technical University, 2019 · **Microsoft Technology Associate:** Software Development Fundamentals, 2021 · **GitHub Trusted Committer**, 2025
- **Schwab recognition awards (2023–2026),** including team awards for two production launches and an award for third-party API work