

Benjamin M. Scarbrough

Site Reliability Engineering · Secure Cloud & Distributed Systems

📍 Seattle, WA • ✉ Scarbrough.Benjamin@gmail.com
🌐 bscarbrough.com • 📺 in/benjaminscarbrough

I build and operate secure production cloud systems for mission-critical environments, keeping large service fleets reliable, automated, and incident-ready under high-stakes requirements. At Microsoft I run cloud infrastructure at scale for compliance-strict customers; earlier, I built safety-critical software in aerospace defense.

Skills

Reliability & Cloud	Site Reliability Engineering, Azure, Incident Response (IcM), On-Call, Monitoring & Observability, Distributed Systems, Disaster Recovery (BCDR)
Security & Compliance	FedRAMP, Sovereign/Air-Gapped Cloud, Managed Identity, Key Vault, Vulnerability Remediation, Audit Evidence
Automation & Infra	CI/CD, Infrastructure as Code, Bicep, EV2 Pipelines, Docker, Synthetic Monitoring
Data & Query	Kusto/KQL, SQL, Cosmos DB, Log Analytics
Languages	Python, C#, Java, TypeScript, JavaScript, PowerShell, SQL
Leadership	Cross-functional Delivery, Stakeholder Management, Technical Mentorship

Experience

Software Engineer, Microsoft Nov 2022 – Present
Responsible for reliability, performance, and deployment of mission-critical cloud infrastructure across both public and isolated production cloud environments.

- Share weekly primary/backup on-call across a 50+ service production portfolio spanning public and sovereign clouds, with direct squad responsibility for a subset.
- Achieved FedRAMP audit readiness across multiple annual cycles, collecting full evidence in ~2 days versus the weeks typical elsewhere, supporting sales into compliance-restricted public sector markets.
- Drove incident auto-mitigation from 0% to a peak of ~95% over 9 months in a sovereign cloud environment, with auto-resolution rising from 0% to a 39–65% band.
- Remediated two pre-authentication vulnerabilities (SSRF, forged-JWT) prior to production rollout; served as team Security Champion driving org-wide vulnerability burndown.
- Cut manual certificate rotation ~90% by migrating three service families to managed identities, returning ~30 engineer-hours/month; reduced manual configuration work ~70% via a centralized config service.
- Built six operational tooling packages for on-call workflows, spanning privileged access, service validation, alert generation, and AI-assisted synthetic-job creation.
- Drove ~\$1.5M/yr recurring cost savings by re-tiering storage across eight services with no loss of compliance posture.
- Designed and shipped a net-new monitoring stack of 36 production alert rules across two sovereign clouds, incident-routed and hardened against schema drift, closing a detection gap where regressions were previously customer-reported.

Director of Operations, TEDxAnchorage Jun 2022 – Present
Director of Operations on the 10-person Executive Team of Alaska's premier TEDx event; promoted from Administrator, September 2024.

- Direct all operational aspects of an annual conference supporting ~10 speakers: logistics, vendor management, venue coordination, and volunteer scheduling, leading cross-functional volunteer teams without traditional employment authority.
- Partner with the Finance, Partnerships, and Production directors on timelines and stakeholder communications, delivering under capped ticket pricing and prohibited-crowdfunding licensing rules.
- Coordinate a variable per-event volunteer crew, building ownership, trust, and psychological safety across cross-functional teams without traditional employment authority.

Software Engineer, Lockheed Martin Space Feb 2022 – Nov 2022
Modernized legacy systems behind 120+ internal customer-facing applications in a high-security aerospace environment, supporting mission-critical national defense operations.

- Engineered C# and Java automation for internal reporting, replacing manual report generation with scheduled, repeatable pipelines.
- Modernized legacy reporting onto current tooling with Tableau, turning hand-serviced data requests into self-service visibility.
- Built and supported applications in an air-gapped, need-to-know environment, where no external connectivity and compartmented access constrain every build and debugging path.

Projects

Pourfolio - pourfolio.wine Next.js, FastAPI, PostgreSQL, Azure, OpenAI
• Privacy-first wine cellar platform with an async FastAPI backend and AI sommelier, keeping zero PII in the database; deployed to Azure with Bicep IaC and 33 automated audit scripts.

RGBPuzz - rgbpuzz.com React, TypeScript, Azure Functions
• Daily color-sorting puzzle game with 400+ progressive levels, OAuth via Azure B2C, and cryptographic protection against value inspection.

Education

Bachelor of Science, Computer Science University of Puget Sound
Minors in Mathematics & Spanish Tacoma, WA