

Thomas Carmichael

Email: hello@tdosmail.com

Website: tmcarmichael.com

GitHub: github.com/tmcarmichael

Location: Austin, TX

Phone: +1 (512) 660-7058

LinkedIn: linkedin.com/in/thomasmcarmichael

SKILLS

- **Languages:** Python, Go, TypeScript/JavaScript, SQL, C#/.NET
- **Cloud/Infra:** Azure, AWS, Docker, Kubernetes, Terraform, GitHub Actions, Linux, GraphQL
- **Data:** PostgreSQL, Redis, MongoDB, CosmosDB, Kafka, Azure Data Explorer

EXPERIENCE

- **Microsoft** July 2022 – Present
Software Engineer II Austin, TX
 - Architected and shipped Teams SMB license request & approval workflow across two Teams surfaces and a new Microsoft Catalog entry, enabling Exploratory users to upgrade to paid licenses. Coordinated 20+ stakeholders across 5+ orgs (Teams Premium, COGS, CELS, Amplify, Commerce), driving 500+ paid upgrades in month 1 and thousands of approved requests overall; instrumented telemetry dashboards and automated test coverage.
 - Owned key Live Chat feature areas (AI support embedded on customer websites for Teams SMB admins) on a 15–20+ engineer team; led design and end-to-end delivery across a multi-repo codebase. Detected and drove a cross-org fix for an LLM intent regression, restoring 100% correct resolution for “business hours” queries; improved reliability via observability, feature-flag rollouts, and 2 production hotfix backports.
 - Led development of contact suggestions in Teams SMB, deployed to tens of millions of users. Partnered with GraphQL and Teams Architecture to adopt GraphQL resolver best practices, improving maintainability and performance. Validated impact via A/B analysis with Data Science, showing a statistically significant lift in MAU/MEU.
 - AI Champion for SMB org: ran org-wide surveys, delivered GitHub Copilot workshops and Claude Code demos, driving developer AI tool usage from 65% to 92.5% over 8 months.
 - Primary DRI/on-call engineer for high-severity incidents, leading SEV-1 and multiple SEV-2 outages through bridge calls, rapid mitigation, and stakeholder communication. Drove post-mortems and remediation execution across repeated on-call shifts.
- **IBM** June 2021 – July 2022
Cloud Software Developer Austin, TX
 - Built a Go microservice plugin for IBM Cloud to enforce Terraform security/policy validation pre-deploy across multiple teams, saving 10+ developer hours per sprint and reducing misconfigurations.
 - Developed an event-driven solution using IBM Cloud Functions and Kafka to automate license retrieval for OS packages and languages, enabling SBOM generation and expanding compliance/security automation.
 - Improved Cloudant/CouchDB query performance through tuning, index refactoring, and schema updates, reducing p50 query latency by ~20%; validated via LogDNA and New Relic.
- **PROS** December 2019 – June 2021
Software Engineer Houston, TX
 - Contributed ~25% of a company-wide 2.x to 3.x Kubernetes Helm chart migration.
 - Extended Data Platform APIs and refactored JavaScript from chained Promises (.then()) to async/await; expanded Swagger documentation to improve maintainability and accelerate validation for API consumers.

PROJECTS

- **NxtChess** – github.com/tmcarmichael/nxtchess Multiplayer chess platform with AI training modes and custom engine playstyles; supports shareable anonymous games and OAuth 2.0 login.

EDUCATION

- University of Houston — M.S. Computer Science (GPA: 3.7); University of Texas at Austin — B.S. Biology

PUBLICATIONS

- Dai, G., Paluri, P., **Carmichael, T.**, Cheng, A., Miikkulainen, R. *Leveraging the Selfless Driving Model to Reduce Vehicular Network Congestion*. IEEE RTSS, 2019.