Nate McDowell

Director of Engineering · AI Tooling & Developer Platform

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SUMMARY

Director-level engineering leader with 13 years managing up to four teams and 25 people across global, cross-functional organizations. Builds AI developer tools, agent/MCP integrations, internal platforms, and CI/CD systems that raise velocity and quality at scale. Hands-on in TypeScript, Node.js, cloud infrastructure, and test automation; partners with product and executives to turn agentic workflows into production tooling rather than demos.

TECHNICAL SKILLS

AI Tooling: AI agents, LLM tooling, AI skills, Model Context Protocol (MCP), AI code review, prompt-driven app generation, developer enablement

Languages: TypeScript, JavaScript, Python, Go, PHP, Ruby, Bash, HTML5, CSS3

Platform & Frameworks: Node.js, React, Next.js, Angular, Express, Redux, Svelte, Ruby on Rails

Quality & Delivery: Playwright, Cypress, Jest, Selenium, Jasmine, Cucumber, GitHub Actions, GitLab CI, Jenkins

Cloud & Infrastructure: AWS, Google Cloud, Docker, Kubernetes, Terraform, Linux, PostgreSQL, MongoDB, GraphQL, gRPC, Firebase

Leadership: Multi-team leadership, platform engineering, developer experience, Agile, test strategy, executive communication

EDUCATION

University of Tennessee **August 2004 – August 2008**

Communications

EXPERIENCE

Optimum **April 2026 – Present**

Engineering Leader *New York Metro (Hybrid)*

- Shipped AI developer tooling used across the company: an iframe app generator and AI skill that scaffolds platform-styled, logic-plumbed apps from a two-sentence prompt.
- Built an AI Skill/MCP over an internal data explorer covering five API providers; engineers retrieve account or order session data with a short prompt and a small JavaScript snippet.
- Embedded AI auto-review into a fail-fast GitLab CI/CD suite with unit, end-to-end, and visual-diff tests, shortening pull-request cycles and adding coverage reporting.
- Stood up unit-test practice where it had not been required: 7,000+ test files and 61% coverage in three months; doubled team velocity, cut regressions 40%, and drove production reverts from ~8/month to 0 for two months.
- Partnered with the CPTO on an authenticated iframe engine with bidirectional data sharing; delivered five production implementations in one quarter without blocking the core platform.

Brandorr Group **January 2023 – April 2025**

DevOps *New York*

- Built workflow agents that ran against client infrastructure and added screenshot plus integration tests covering every page of client sites.
- Shipped React and Next.js interfaces with a shared design-system theme layer so each client app could be branded without custom CSS forks.

SkeletKey **January 2023 – Present**

Founder *Wytheville, VA*

- Designed a foldable electric motorcycle after a year of efficiency research, daily iteration, and field testing in Amsterdam; integrated CAN Bus and USB protocols and grew the audience to 16,000+.
- Adopted AI agents, skills, MCP tooling, and LLM assistants in product and engineering workflows.

Condé Nast **April 2019 – January 2023**

Senior Engineering Manager *Remote*

- Led the global platform migration of The New Yorker, Vogue, GQ, and Vanity Fair from separate repositories to a configuration-driven, multi-tenant application.
- Scaled the Verso engine on AWS, Docker, Kubernetes, Node.js, TypeScript, and GitHub Actions to serve Condé Nast brands and power approximately 80% of company web revenue.
- Built Multiverso, an internal developer platform that provisioned up to 100 multi-tenant pull-request preview environments and raised engineering throughput.
- Implemented a Cypress end-to-end suite that reduced production defects 90%.

Vitals **January 2013 – April 2019**

Engineering Manager *Remote*

- Led six cross-functional engineers on the web platform later acquired by Zelis, including HIPAA-compliant access controls for protected family-member data.
- Delivered a shared Angular component library and an end-to-end testing framework used across repositories, cutting regressions 85%.