

Nick Shimokochi

nick@shimokochi.com | 313.451.1382 | Detroit, MI | [linkedin.com/in/nicholas-shimokochi](https://www.linkedin.com/in/nicholas-shimokochi) | github.com/muziqhed

I build the systems and the teams that drive engineering velocity, operational efficiency, and business impact.

PROFILE

Engineering manager with hands-on depth in cloud-native platform engineering, distributed systems, and CI/CD. Consistent track record of stepping into complex technical and organizational situations and creating clarity, momentum, and results. I lead from the front: architecture decisions, direct IC contribution, and a structured approach to the professional growth of each team member. I build teams around clear communication, thoughtful planning, and a culture where engineers take ownership of execution.

EXPERIENCE

Citrine Informatics

San Francisco, CA (Remote)

SOFTWARE ENGINEERING MANAGER

2025–Present

Platform engineering leadership for a materials science AI/ML platform – infrastructure and MLOps layer supporting experiment data pipelines, ML workloads, and multi-tenant compute at scale.

- Redesigned deployment architecture to a modern EKS/ArgoCD GitOps platform, eliminating operational toil and establishing a scalable multi-tenant foundation for ML workload execution.
- Took over a multi-tenant compute migration mid-effort, built on the Temporal task framework, and drove it to production delivery.
- Drove improvements in team cohesion, collaboration, and delivery velocity through direct people development and clear expectation-setting.

Nebula.io

New York, NY (Remote)

ENGINEERING LEAD

2022–2025

Managed two concurrent teams – development (up to 11) and DevOps (2) – while contributing directly as an IC. Nebula was an AI-driven talent intelligence platform; my teams owned the product backend and all infrastructure.

- Reduced build times 50%+ and cut deployment costs 25%+ by re-engineering the CI/CD pipeline, including advanced GitHub Actions patterns: GitHub Apps for in-workflow authorization, shared workflows, and repository dispatch.
- Architected a task execution framework that became the backbone of core platform functionality.
- Owned all infrastructure supporting the AI platform – compute, deployment, and operational reliability.

Pantheon Systems

San Francisco, CA (Remote)

ENGINEERING MANAGER

2021–2022

- Improved product stability and delivery consistency across the Autopilot product team.

Altair Engineering (now Siemens HPCWorks)

Troy, MI

LEAD SOFTWARE ENGINEER

2014–2021

Grew from software engineer to lead by 2019, taking on architectural ownership and team direction across multiple product lines.

- Designed and built a plugin-style distributed task execution framework in Python over AMQP – became the architectural foundation of Altair Control (now HPCWorks Control).
- Replaced a third-party installer with an original Python framework, including a purpose-built graph contraction algorithm for dynamic dependency resolution – removed a hard bottleneck and put release capacity in the team's hands.
- Automated HPC system deployment and configuration (PBS Pro) across on-premise and cloud environments.

SKILLS & EXPERTISE

Leadership: Team building · Performance management · Hiring · Technical mentorship · Agile process design

Cloud Development: GCP · AWS · Azure · Docker · Kubernetes · Linux

Platform & Infrastructure: Kubernetes (EKS, k3s) · Karpenter · ArgoCD · Helm · Terraform · Docker · AWS · GCP · Linux

CI/CD & Pipelines: GitHub Actions (advanced) · GitLab CI · Jenkins · Docker layer optimization · Self-hosted runners · GitHub Apps · Shared workflows · Repository dispatch

Orchestration & Distributed Systems: Temporal · AMQP · Multi-tenant compute architecture · HPC (PBS Pro)

Observability: Datadog · Prometheus/Grafana

Recent Stack Experience: Python · FastAPI · Flask · Bash · MongoDB · Keycloak · PostgreSQL · Elasticsearch

AI-Assisted Development: Deep integration of Cursor and Claude Code · Agentic coding workflows · Context engineering · Custom tooling built on LLM APIs · MCP server development

PROJECT HIGHLIGHTS

Citrine Informatics

EKS, ArgoCD, Temporal, AWS, Kubernetes, Terraform, Datadog

ML platform infrastructure for materials science – multi-tenant compute supporting experiment data pipelines and ML workloads.

citrine.io

Nebula.io

Python, Flask, GCP, Docker, Kubernetes, Elasticsearch, LLM, NLP, Jenkins

AI-driven talent intelligence platform. Technical direction, team leadership, product backend, and all DevOps. nebula.io

Altair Control

Python, RabbitMQ, Docker, Postgres, MongoDB, Bash, Linux, Azure, GitLab CI

Single pane of glass for HPC cluster configuration, analytics, and scheduler simulation. DevOps, backend design, architecture, and implementation. Product now HPCWorks Control under Siemens Xcelerator.

EDUCATION

Oakland University

M.A., Applied Mathematics · PhD coursework completed · 2006–2011

Rochester, MI

Middle Tennessee State University

B.S., Applied Mathematics · 2001–2006

Murfreesboro, TN