

Quoc-Viet Bui

309 631 4531 | buiquocviet99@gmail.com | [LinkedIn](#) | [Portfolio](#)

Software Engineer — full-stack, Python, TypeScript, REST APIs, GenAI tooling

EDUCATION

University of Dayton — Master of Science in Computer Science

Aug. 2023 – Dec. 2025

Augustana College — B.A. Applied Mathematics & Computer Science

Aug. 2019 – May 2023

WORK EXPERIENCE

Open Source Contributor | GitLab / CodePath — Remote, US

Feb. 2026 – Present

- Contributed to GitLab CE in Ruby; shipped features and bug fixes reviewed by senior platform engineers at GitLab
- Configured CI/CD pipelines in GitLab for automated testing, linting, and multi-stage deployment on open-source code
- Automated infrastructure provisioning with Ansible and Terraform IaC for reproducible stack deployment workflows
- Collaborated with senior engineers on code review, iterating Ruby implementations to meet production standards
- Built LLM-assisted tooling for code review workflows as part of CodePath mentorship with GitLab engineers

Complex Systems Research Engineer | Carboncopies Foundation — Remote, US

Jul. 2025 – Present

- Delivered 4+ production features per sprint end-to-end across design, implementation, testing, and deployment phases
- Built React dashboards and FastAPI microservices in Python, automating simulation validation and reducing QA by 60%
- Developed monitoring tooling tracking 50+ system health metrics across distributed simulation clusters
- Automated CI/CD pipelines with GitHub Actions and Docker, cutting deployment time from 2 hours to 30 minutes
- Wrote runbooks for distributed simulation systems; reduced onboarding time and improved cross-team handoffs

Graduate Research Assistant | University of Dayton — Dayton, OH

Aug. 2023 – Aug. 2025

- Co-authored IEEE KSE 2024 paper on adversarial RL robustness; entropy-based imposter detection at 97%+ accuracy
- Wrote Python and TypeScript tooling for data processing, automation, and multi-system state management
- Designed and executed test suites for research systems; analyzed failure modes and iterated on fixes
- Authored technical documentation for 3 systems; presented research to cross-functional teams of 100+ students
- Built Coq framework translating Program Graphs to safety proofs; detected integer overflow and injection attacks

RELEVANT PROJECTS

Music Social Board | Next.js, tRPC, PostgreSQL, Docker

[GitHub](#) May 2025 – Present

- Built music discovery platform in Next.js with tRPC APIs and Prisma ORM supporting 100+ concurrent users
- Integrated OAuth 2.0 with PKCE flow across Spotify, Last.fm, and Google with multi-provider account linking
- Optimized tRPC endpoints for 99.5% uptime via PostgreSQL indexing, query tuning, and connection pooling

MRR Analytics Dashboard | FastAPI, Python, BigQuery, SQL

[GitHub](#) Feb. 2026 – Present

- Built Stripe-to-BigQuery ETL pipeline in Python normalizing 6 months of billing data with idempotent loads
- Designed 4 FastAPI endpoints serving MRR metrics and subscription breakdowns at sub-200ms response time
- Engineered idempotent ETL upserts keyed on invoice IDs, ensuring data consistency across repeated pipeline runs

Obsidian AI Workflow Engine | TypeScript, Claude API, MCP

[GitHub](#) Oct. 2025 – Present

- Built TypeScript Agent Orchestrator chaining LLM calls across parsing, profile matching, and DOCX generation
- Designed MCP connectors for filesystem I/O and vector retrieval with end-to-end validation across 50+ file batches
- Shipped React Flow canvas for composable agent workflows with JSON/YAML pipeline configs for reproducible runs

TECHNICAL SKILLS

Languages | Python, TypeScript, JavaScript, Go, Rust, C#, SQL, Bash

Frontend | React, Next.js, tRPC, TanStack Query, Tailwind CSS, component-based architecture

Backend | FastAPI, ASP.NET Core 8, Node.js, REST APIs, PostgreSQL, Redis, Docker, microservices

AI & Data | Claude API, LangChain, Gemini AI, MCP, BigQuery, ETL pipelines, data modeling

Infra/Tools | GitHub Actions CI/CD, Terraform, Ansible, GitLab CI/CD, Linux, Git, Proxmox