

EMILY NGUYEN

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SOFTWARE ENGINEER specializing in developer tooling, test infrastructure, and AI-augmented engineering workflows, with 5 years of experience building CI/CD systems, test frameworks, and LLM-powered automation at scale. Passionate about autonomous coding agents and tools that accelerate engineering productivity.

PROFESSIONAL EXPERIENCE

Senior Software Engineer @ Meta

Jul. 2024 - Present *

- Built a hardware CI/CD device testing lab from scratch (0→1), provisioning 8 servers and 30+ devices across 2 racks with automated health checks and remote device leasing, enabling continuous build qualification for wearable device programs supporting 300+ deployed research units.
- Designed end-to-end test automation pipelines for embedded wearable devices, integrating device-on-rack infrastructure with automated quality-gating suites on every build, and established oncall rotations and incident response processes to maintain infrastructure reliability.
- Defined the test strategy and quality bar framework for wearable device releases, establishing build stamping criteria, test coverage dashboards, and a repeatable release qualification process that surfaced 72 bugs pre-release — then trained a contract QA team to operate it independently.
- Led a device testing team of 3 engineers, owning scope definition, onboarding, and training — recognized with an engineering award for “single-handedly pioneering release testing and defining the first structured software test strategy” for the organization.
- Built AI-powered developer tooling including a custom LLM IDE plugin for automated diff setup and task management, and an AI agent pipeline that generates and updates team wiki documentation from code changes — reducing manual overhead across the team’s development workflow.

Senior Software Engineer, Games, Audio, Test @ Dolby Laboratories

Jan. 2021 - Dec. 2023 *

- Released the Dolby Atmos Plugin for Unreal Engine, a cross-platform real time audio-processing SDK, with a team of 12, in collaboration with Epic Games, as well as other game studios and partner teams.
- Created Python interfaces for complex applications and a real-time audio C++/C SDK as a solution for integrating tools in automated workflows.
- Contributed to and optimized CI/CD systems for multiple projects, navigating complexities posed by hardware configurations and multi-platform validation, including an automated pipeline of 300+ integration and unit tests, packaging, and deployment, speeding up previous pipelines by 33%.

RELATED EXPERIENCE

Code Coach @ the Coder School

Jul. 2019 - Jan. 2021

- Instructed students between the ages of 7-16 in personalized one-on-one or one-on-two sessions, delivering comprehensive lessons on programming languages such as Scratch, Python, Java, and C#, emphasizing problem-solving, algorithm design, and project-building.
- Led nine week-long camps with 12-14 students each, resulting in each student producing a polished deliverable.

XR/VR Course Facilitator @ University of California, Berkeley

Jan. - May 2020

- Facilitated a virtual reality development course for students at UC Berkeley, teaching Unity and C# through hands-on labs and a final project.

PROJECTS

AI-Powered Developer Tooling

2025 - 2026

- Designed an LLM tool-use automation system for autonomous coding agents, including hook-based orchestration, real-time terminal status indicators, a dual-agent pre-push code review gate, and prompt-engineered iteration loops.
- Built a multi-agent orchestration framework with automated validation, persistent cross-session memory, and event-driven notifications for AI-assisted development workflows.

Pixietown

2026

- Python, JavaScript: Built a multi-agent orchestration visualizer with real-time state management, a Python bridge that polls task state files and broadcasts agent activity over WebSocket to a pixel-art frontend rendering live orchestration status.

SKILLS

Programming Languages: Python, JavaScript, TypeScript, C++, Java, C#

Tools and Practices: CI/CD pipelines, Docker, AWS/cloud platforms, Chef, git, GitLab CI, FastAPI, Node.js, Playwright, test automation, release eng.

EDUCATION

Bachelor’s in Computer Science, 2020

University of California, Berkeley

*Traveled internationally while exploring new opportunities during a planned career pause.