

Patrick Selamy

New York, NY | (210) 704-7370 | pselamy@gmail.com | selamy.dev | linkedin.com/in/patrickselamy | github.com/pselamy

Software Engineer, Core Infrastructure / Browser Agents, Distributed Platforms, and Reliability

Summary

Software engineer focused on production agent infrastructure, distributed platform systems, developer APIs, and reliable automation. Former Meta and Google engineer who built early Gemini-based software-engineering agents, SWE-bench-style evaluation harnesses, vector-search benchmarks, and product/platform systems. Runs a live autonomous-agent fleet with MCP-style tools, CI-backed verification, observability, recovery loops, and browser-capable workflows.

Selected Infrastructure & Browser-Agent Portfolio

Agent Runtime, APIs & Platform Foundations

- Built a live multi-agent runtime with callable tools, reusable skills, browser actions, credentialed workflows, and orchestration patterns for long-running automation.
- Designed tool-use contracts, dispatch/fan-out patterns, and CI-backed verification loops for autonomous engineering work across repos, documents, and web/browser tasks.
- At Google Cloud Office of the CTO, built Gemini-based software-engineering agents, SWE-bench evaluation harnesses, and vector-search benchmarks for agentic coding workflows.

Reliability, Operations & Product Infrastructure

- Instrumented systems with traces, metrics, logs, failure-recovery signals, and quality gates so production behavior is inspectable and debuggable.
- Built backend and platform services across Google, Meta, Citi, ClearDATA, and Lumeris, with strong Python/Java depth and AI-assisted TypeScript capability.
- At Meta Marketplace, expanded third-party partner APIs and shipped-listing workflows, then launched an ML-assisted listing flow that improved new-listing creation about 8%.

Experience

Meta, Software Engineer

New York, NY | 2025 to 2026

- Expanded Facebook Marketplace third-party partner APIs and shipped-listing workflows for partner and seller-facing commerce.
- Shipped an ML-assisted listing flow that removed manual item-weight entry for shipped listings; predictions were evaluated against user-entered weights and carrier actuals, met the launch threshold near 80% accuracy, and lifted new-listing creation about 8%.

Google, Software Engineer

Pittsburgh / Austin / Remote / Atlanta | 2018 to 2025

- Worked across Google Shopping (Engineering Productivity), Google Play, Google Cloud Office of the CTO, and Internal Identity and Access Management.
- In Google Cloud Office of the CTO, built early agentic-coding systems: a Gemini-based software-engineering agent, SWE-bench eval harnesses, and planning-vs-execution metrics that guided funding and staffing; benchmarked vector-search frameworks at scale (ScaNN, FAISS, pgvector) to position GCP's AI competitively.
- In Google Play, helped build [Play Games Leagues](#) from the ground up on a five-engineer team and designed a configurable fuzzer for third-party Play APIs.
- Built Insider Risk systems for internal security, enterprise identity, and trust-sensitive access.

Earlier, Backend / Platform / Healthcare Engineering

Citi, Lumeris, ClearDATA, and others

- Built backend, platform, cloud, and healthcare systems in Python and Java across APIs, data workflows, and regulated environments.

Selected Systems & Public Work

- [Public agent-skills](#): reusable agent procedures, authoring patterns, and an MCP-vs-skills framework.
- [Operating Agent Fleets](#): an evidence-backed field guide for durable agent systems and bounded authority.
- [polymarket-insider-tracker](#): a Python tool that flags suspicious wallet activity on Polymarket prediction markets.
- AI instructor and speaker: led an [Ayiti AI](#) bootcamp session on MCP, AI-assisted coding, and deployment, and [addressed lawmakers on AI policy](#) at the NHAEON National Leadership Summit.

Technical Skills

Languages:	Python, Java, Kotlin, JavaScript/TypeScript, Hack, PHP, Bash, SQL
AI / Agent Systems:	AI agents, skills/playbooks, MCP-style tools, tool calling, evals, agent harnesses, autonomous coding loops, context engineering, RAG, model routing, secure tool execution, state management
Product & Systems:	API design, backend platforms, distributed systems, workflow orchestration, product metrics, experimentation, launch analysis, developer infrastructure
Security & Enterprise:	internal IAM, auth boundaries, insider-risk systems, credential brokering, trust-sensitive workflows, privacy/security review gates
Infrastructure:	Kubernetes, OpenTofu/Terraform, Argo CD, Docker, Linux, GitHub Actions, Actions Runner Controller, CI/CD, observability, multi-cloud
Data & Cloud:	PostgreSQL, Redis, Kafka, InfluxDB, Google Cloud, AWS