Sam Fiallos

New York, NY | (516) 234-1433 | s.fiallos@nyu.edu

linkedin.com/in/sam-fiallos | github.com/samthropic | samfiallos.com

EDUCATION

New York University, Tandon School of Engineering **May 2027**

Bachelor of Science in Computer Science *Brooklyn, NY*

Relevant Coursework: Algorithms, Artificial Intelligence, Computer Networking, Computer Architecture, Operating Systems, Agile/DevOps

SKILLS

Languages: Python, C++, Go, C#, TypeScript, JavaScript, SQL

Frameworks & APIs: React, Next.js, FastAPI, Flask, Node.js, Express.js, .NET, Redux Toolkit, REST APIs

Databases & Infrastructure: PostgreSQL, Cosmos DB, MongoDB, Kubernetes, Docker, Linux, Azure, Git, GitHub Actions, pytest, CI/CD

EXPERIENCE

Microsoft **May 2026 - Aug. 2026**

SWE Intern, Commercial Engineering & AI *Redmond, WA*

- Built a **C#/.NET** authorization system validating ownership against **Microsoft ServiceTree** via **Azure Kusto**, enabling **10+ teams** to safely self-serve configuration changes
- Owned and launched a secure **React/TypeScript AI Workspace** admin portal, reducing service-configuration workflows by **90%+**
- Built a **Cosmos DB-backed MCP server registry** supporting **5+** AI integrations, replacing manual changes with a scalable self-service model
- Built a **C#/.NET** slash-command platform integrating **REST APIs**, enabling **10+ teams** to configure on-demand business data access

Microsoft **May 2025 - Aug. 2025**

Explorer Intern, AI Transformations *Redmond, WA*

- Developed **C#/.NET APIs** and **Cosmos DB-backed** preference synchronization to maintain consistent account settings across **20,000 users**
- Launched a **React/TypeScript** dashboard with **Redux Toolkit** that unified account workflows, saving users **~52 minutes per week.**
- Implemented **AI-powered personalization** across queries, accounts, and tenants, surfacing **$133M+ in blocked tasks** for remediation.

New York University **Sep. 2024 - Present**

Course Assistant, Introduction to Programming *New York, NY*

- Selected as **1 of 6 course assistants from 120+ applicants** to support CS-1114 instruction, labs, grading, and student problem-solving
- Held **8** weekly office hours and led labs for **20+** students, resolving assignment, concept, and regrade questions to help students stay on track
- Guided **130+** students through Python debugging, problem decomposition, and exam prep, helping them succeed in the course

PROJECTS

OweNone | TypeScript | Go | React

- Built OweNone, a group IOU settlement app with a **Go/PostgreSQL** backend supporting real-time balance and transaction processing
- Designed a graph debt compression engine that minimized transfers through cross-group netting across the entire social relationship graph
- Created a **Next.js** and **TypeScript** frontend with debt graph visualization, settlement path recommendations, and real-time expense tracking

Ares | Kubernetes| Go | eBPF

- Engineered a **Kubernetes** delivery platform that automates canary releases, evaluates real-time service health, and rolls back regressions
- Developed a **Go** operator and **Linux eBPF** agent to collect real-time service telemetry and inform automated rollout decisions
- Leveraged **React** and **TypeScript** to visualize rollout status, health metrics, and automated deployment decisions

Microsoft Step (Hackathon) | React | Go | Azure VPS

- Architected and shipped Microsoft Step in **4 days**, a social walking app with GPS-verified tracking, live navigation, leaderboards, groups, and tiered rewards using **React**, **Go**, and **Azure**
- Integrated a **Cerebras-powered AI** walking coach that streams real-time, safety-guarded responses through a **Go** and **SQLite** backend

Calendar AI Agent | Python | FastAPI | pytest

- Built a **Python/FastAPI** AI calendar agent that automates event creation, updates, and retrieval via **Google Calendar API** integration
- Authored API reliability through a team test suite of **130 unit tests** and **4 integration tests** using **pytest** and automated CI checks

Geographic Real Estate API | Python | Flask | MongoDB

- Designed a **MongoDB** schema and built Flask endpoints for a **RESTful real estate API** covering regions, states, neighborhoods, and properties, with automated testing via **GitHub Actions**

ACTIVITIES & CERTIFICATIONS

Leadership: Director of Events & Founding Member, ColorStack at NYU; Public Relations Chair, Society of Hispanic Professional Engineers

Activities: Rewriting the Code, Trio Scholar, Tandon Food Pantry

Certifications: CodePath Intro to Cybersecurity Course, Honors