

Freya Zou

Seattle, WA

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 [Freyzo](https://www.youtube.com/Freyzo)

Work Experience

Microsoft | Copilot Security

June 2026 – Present

Software Engineer II

Redmond, WA

- **Consent evaluation framework:** Built LLM-judge evals (intention accuracy, takeover quality) to measure and validate consent policy compliance across Cowork MSA flows for OneCopilot surfaces; authored the quality-metrics-model spec defining canonical KPI taxonomy, metric owners, and quality thresholds.
- **Consent quality dashboards:** Shipped a **30+** tile Azure Data Explorer dashboard (KQL, ADX) with unit-tested metric definitions and live health/risk reporting, driving cross-surface consent decision quality for Copilot Spear Security.

Amazon | Alexa Autonomous Agent (AAA)

May 2025 – June 2026

Software Engineer

Seattle, WA

- **MCP adapter pattern:** Designed and shipped the integration layer connecting Python-based LLM agents to Java backend services, including data contracts, sandboxed tool invocation, transport API, and prompt testing harness for multi-agent orchestration workflows.
- **Multi-agent pipeline infrastructure:** Built core pipeline for Alexa+ 2 for autonomous task execution at scale across a multi-agent Python/Java framework, including deep research, content planning, and quality validation with scheduling and notification delivery.
- **Agent memory & compliance:** MemoryDB-backed state for task graphs; DSAR workflows for agent memory plus enterprise governance and privacy for production AI. Cloud coverage reporting, integration tests, and prompt-testing infra for agentic pipelines.

Amazon | Alexa Central Analytics & Research Science

June 2024 – May 2025

Software Engineer

Bellevue, WA

- **PDM caching microservice:** Integrated cache-hit/miss routing into the Alexa+ orchestration pipeline, bypassing content sourcing and ranking on hits and reducing backend calls and latency at millions-of-devices scale.
- **SQS batch API:** Redesigned queue processing from individual sends to batched operations, achieving 10× cost reduction and applied across distributed service boundaries with full CI/CD rollout.
- **BanyanLite & ShareLink:** Shipped notifications for new Alexa hardware (Dec 2024 launch) under tight deadline; built ShareLink for secure one-click transfer of 2000+ utterance IDs between internal platforms.

Projects

Excel Agent Skills | *openpyxl, MCP, skills+shell, token efficiency* | github.com/freyzo/excel-agent-skills

- Token-efficient agent tooling: **25 ops** as MCP server plus skills+shell path; tool-surface tokens **~2.4k** → **~18** per op for minimal path. Full discovery (MCP) or low-context, sandboxed execution (skills+scripts) for agent and assistant workflows.

MCP-ArXiv Deep Research | *MCP, AutoGen, Magentic-UI* | github.com/freyzo/arxiv-deep-research

- MCP server for arXiv search/read in multi-agent stacks (AutoGen, Magentic-UI). Eval (Precision@K, MRR), synthetic benchmark pipeline, OpenTelemetry tracing.

VoxScribe | *Whisper, Web Audio API, Ollama* | github.com/freyzo/VoxScribe

- Privacy-first local voice dictation: real-time speech-to-text (Whisper, Web Audio API), LLM edit (Ollama), global text injection; Tauri-ready.

Technical Skills

Languages: Python, Java, C#, TypeScript/JavaScript, C/C++, SQL, Kotlin

AI/ML: PyTorch, Transformers, LangChain, OpenAI API, Claude SDK, RAG, Vector Databases, Embeddings, Whisper

Agentic Dev: OpenCode, Claude Code, Prompting, Context Engineering, MCP

Cloud & Infra: Azure (ADX/Kusto, DevOps), AWS (Lambda, DynamoDB, S3, CloudWatch, Athena, Bedrock, EKS, SQS), CDK, Docker, Kubernetes, CI/CD

Frameworks: React.js, .NET/ASP.NET, Vue.js, Node.js, Next.js, Spring Boot, Cypress, Jest

Education

Oregon State University

Sept 2021 – May 2024

B.S. in Computer Science, GPA 3.95/4.0

Corvallis, OR