

Aaron Collins

aaron777collins@gmail.com | +1 (517) 515-0233 | [LinkedIn](#) | aaroncollins.info

Experience

Senior Software Development Engineer

Criteo (Ann Arbor, MI)

Apr 2026 - Present

- Retail Media / Onsite Ads / Activation SME: Drive major re-architecture of ad approval systems to improve configuration flexibility. Own Ads Activation (**ad validation and delivery push**) pipelines. Collaborate cross-team for ad delivery workflows (**C#/.NET 10, Angular**).
- Project SME & Core Contributor to the Ad Diagnostic tool MVP (identifying why configured ads do not serve), designed to significantly reduce troubleshooting time and help advertisers get campaigns live faster.
- Selected as **AI Champion** by senior leadership: driving AI adoption, onboarding engineers to AI tooling and workflows, and tracking cross-org AI initiatives. Measured via dedicated OKR.

Software Development Engineer II

Criteo (Ann Arbor, MI)

Oct 2024 - Apr 2026

- Retail Media / Onsite Ads / Fullstack Engineering Project SME: Led major overhaul of Ads Forecasting (**ad delivery demand prediction**) system and built new modules that significantly improved forecast accuracy. Owned pipeline, backend infrastructure, and business requirements implementation. Collaborated cross-team for ad approval workflows (**C#/.NET 8-10, Angular**).
- Owned full project lifecycles from architecture through delivery, driving measurable business impact across cross-domain Onsite Ads initiatives.
- Built **ForgeBot**, a Slack-integrated AI coding agent (Anthropic Agent SDK). Engineers interact with it directly in Slack channels to fix bugs, add features, or summarize topics, reducing context-switching overhead.
- Developed **Claude Code Helper**, a CLI harness wrapping Claude Code with experimental agent teams, multi-threaded conversations with thread tracking, pre/post-instruction injection, and post-hook scripting. Accessible via private Slack DM. Boosted developer productivity.

Software Development Engineer

Criteo (Ann Arbor, MI)

Oct 2023 - Oct 2024

- Delivered high-value Onsite Display Ads features including UserNotification, Auction BuyType (auction-based bidding for display line items), and Max Scale (multi-creative support, expanded configuration). Drove strong stakeholder engagement (**C#/.NET 6-8, Angular**).
- Resolved critical production bugs with potential for significant financial impact across ad serving systems.
- Authored operational documentation, Grafana dashboards, and alerting systems, transforming incident response. Go-to knowledge source for Criteo's async AWS messaging infrastructure.

Software Developer Co-op (2x)

Rocket Innovation Studio (Windsor, ON)

May - Aug 2021, Jan - May 2022

- Developed front-end components in Angular 11/AngularJS with full unit test coverage and backend services in .NET Core 3/5/6.

Head Teaching Assistant & Lead Research Assistant

University of Windsor (Windsor, ON)

Sep 2021 - Aug 2023

- Head TA for the Python programming course; also served as TA for one additional course.
- Led connected/autonomous driving research using machine learning. Managed and mentored a team of research assistants.
- Published cognitive load recognition paper (Sci-Kit Learn, eye-tracking) at ACR'23, published by Springer. [Cognitive Load Recognition via Eye-Tracking](#)
- Built configurable ML pipeline for BSM classification in connected driving (Sci-Kit Learn, TensorFlow, Pandas). [ConnectedDrivingPipelineV4](#)

Projects

PortableRalph

Jan 2026 - Present

- Autonomous AI development loop that works in any repo. Cross-platform (Linux, macOS, Windows), 13+ GitHub stars. [GitHub](#) | [Docs](#)

SOPHIE

2025 - Present

- Personal AI life assistant accessible via Slack, Discord, and voice calls. Manages emails, preps tax documents, makes phone calls, and works on side projects autonomously using skills/MCP integrations. [sophie](#) | [sophie-mcp](#) | [sophie-voice-bridge](#)

Minecraft Datapack Language (MDL)

2024 - Present

- Compiler and programming language for Minecraft datapacks with if/else, loops, and variables. Published on PyPI with a VS Code extension. [GitHub](#) | [Docs](#)

Control Windows

Jun 2020 - Jan 2023

- Desktop automation tool using Python and PyAutoGUI with auto-code generation capabilities. [GitHub](#) | [Docs](#)

ZeroTier-GUI-Arch

2023 - Present

- ZeroTier GUI client for Arch Linux / Steam Deck. 41+ GitHub stars, popular in the Steam Deck community with active releases via Flatpak. [GitHub](#) | [Docs](#)

More projects at aaroncollins.info/projects / github.com/aaron777collins

Education

Bachelor of Computer Science (Honours)

University of Windsor

2023

- 94% Major Average (With Great Distinction)
- President's Renewable Entrance Scholarship (95% Entry Average)
- NSERC Undergraduate Student Research Award

Skills

- **Languages:** C#, Python, Java, TypeScript, JavaScript, C, R, SQL, Bash
- **Frameworks & Web:** .NET (Core 3-10), Angular, React, Flask, Node.js, HTML, CSS/SCSS
- **AI & ML:** Anthropic Agent SDK, Claude Code, AMP, Cursor, MCP, Ollama, TensorFlow, Sci-Kit Learn, Pandas, NumPy
- **Infrastructure & DevOps:** Docker, AWS (SQS, Lambda, ECS), Jenkins, Grafana, Kibana, NGINX, Caddy, Authelia (SSO), CI/CD