

# Benjamin Hilderman

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## PROFESSIONAL EXPERIENCE

**Ciena**, Ottawa, ON

May – Aug (2023, 2024, 2025)

Software Engineer Intern (Performance & Test Automation / DevOps)

- Rehired **3 internships**; owned CI/CD release gates + regression automation (Angular TestBed/Jasmine, Spring Test/Mockito, Playwright) for an org-wide Angular/Java budgeting platform managing **\$1B+** budgets/headcount; enforced zero-regression with PR validation + release-blocking checks across **200+** source files.
- Automated Perforce license hygiene (Python/Bash cron): audited accounts/CI sessions, secured credentials, closed stale sessions; prevented license exhaustion and reclaimed **500+** tokens (worth **\$10K+/year**).
- Improved PR-gate signal by reproducing Linux-only failures and debugging Jenkins logs + app telemetry; made Playwright runs deterministic via stable locators, explicit assertions/waits, and isolated test data.
- Led PR reviews for test + pipeline changes (Git/Bitbucket, Jira); enforced quality standards, approved merges, and published Confluence release notes/rollout plans for traceable deployments.

**The County Cooperage**, Ottawa, ON

Jan 2022 – Apr 2022

Full Stack Web Developer

- Improved Shopify storefront performance and maintainability by refactoring Liquid theme architecture (sections/snippets/templates) and optimizing JavaScript/CSS delivery, shipping changes via Git PRs.
- Improved conversion and user flow by analyzing GA + Shopify analytics to identify drop-offs, then implementing navigation and template changes, contributing to a **~35%** increase in sales.

**Contractor (Self-employed)**, Ottawa, ON

Oct 2020 – Apr 2022

Founder, Media Production (Automation & QA)

- Drove **10M+** YouTube views by delivering reliable, repeatable editing outputs under tight deadlines using Python + FFmpeg automation (batch exports, reusable presets, scripted workflows).
- Cut turnaround to **6–12** hours and reduced revisions by batching ingest/export/handoff with folder watchers, scripted QA checkpoints, and strict versioning/naming conventions.

## EDUCATION

**Queen's University**

Sep 2022 – Apr 2026\*

Bachelor of Computer Science (Honours), GPA 3.72 (Dean's Honours List), Varsity Tennis

- Relevant: Operating Systems (Java), System Level Programming (C/Linux), Software Quality Assurance, Database Management Systems (SQL/DDL), Formal Methods in Software Engineering; Clubs: QVIBE, QMIND.

**Algonquin College**

Sep 2020 – Aug 2022

College Diploma, Interactive Media Design Co-op, GPA 3.74 (Dean's Honours List)

- Relevant: Content Management Systems I/II, Web Development III ([ballintotasalpacas.com](http://ballintotasalpacas.com)), Responsive Web Design I/II.

## PROJECTS

**GymQuest**, Personal Project

Swift • FastAPI • FAISS/RAG • XCTest/XCUITest • Fastlane CI

AI Coach and Training Planner ([Source code](#), [Demo](#))

- Built an offline-first iOS fitness app with local persistence + optional FastAPI backend for training-load scoring + a grounded RAG coach (FAISS + embeddings); wrote **50+** automated tests (unit/integration/snapshot/UI/perf) running in CI (Fastlane); evaluated the coach with a **25**-case set across **120** sessions.

**LLM Journaling App**, Personal Project

Embeddings • FAISS • RAG • Golden Regression Tests

Reflection and Semantic Retrieval ([Source code](#), [Demo](#))

- Built an LLM journaling web app with embeddings + FAISS semantic search and grounded RAG reflections; indexed **150** entries and added **20** golden regression tests to prevent prompt/format drift.

**SpotterBox**, QHacks 2025

Swift • Spotify OAuth2 • Keychain • Core Data/SQLite • LLM API

AI Music Discovery iOS App ([Source code](#), [Demo](#))

- Built an iOS AI music discovery app in **<48** hours with Groq/Ollama, Spotify auth, swipe-to-train feedback, and persisted state (Core Data/SQLite) with secure credentials stored in Keychain; kept auth/LLM/persistence behind small service layers to keep UI flows testable and maintainable.

## TECHNICAL SKILLS

**Languages:** Python, TypeScript/JavaScript, Java, Go, C/C++, Bash, Swift

**Dev/Infra:** Linux • Jenkins • Git/Bitbucket • Angular 16+ • Spring Boot/Hibernate • REST/Microservices • Unit tests

**AI/Data:** PostgreSQL • SQL/DDL • PyTorch • OpenAI/Groq • FAISS/RAG