

Bader Aljabri

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EDUCATION

University of Waterloo

Waterloo, ON

Bachelor of Computer Science

2024-2029

Relevant Coursework: Algorithm Design, Sequential Programs, Functional Programming, Data Structures

Wilfrid Laurier University

Waterloo, ON

Bachelor of Business Administration

2024-2029

President's Gold Scholarship (\$20,000) 95%+ Average

TECHNICAL SKILLS

Languages/Frameworks: Python, C++, C, Rust, TypeScript, JavaScript, SQL, Racket, React, Next.js, Node.js

AI Tools: NVIDIA CUDA + cuDNN, OpenAI API, Codex, Claude Code, Vector DBs (Supabase)

Cloud & Security: AWS, Azure, SOC 2, Vercel, HECVAT, PSIA, IAM

EXPERIENCE

Software Engineer

Jan. 2026 - Apr. 2026

StartUp Lab | TypeScript, React, Next.js, IAM, PSIA, HECVAT, SOC2, Gemini API

Waterloo, ON

- Built the complete student experience for a university consulting platform designed to support 1,000+ users.
- Designed the CRM system StartUp Lab staff use to manage students, employers, and projects on the platform
- Drafted the platform's HECVAT and PSIA assessments, collecting evidence on data handling across the stack.
- Delivered an end-to-end automation for an external logistics business that utilizes AI to automatically extract and process incoming client requests, improving the department's efficiency by 20x.

Software Engineer

Jun. 2024 - Jan. 2026

Patternend AI | React, JavaScript, Python, MCP, LLMs, CI/CD

London, UK

- Built and shipped a full-stack Canva app (Node.js backend, React frontend) that turns a single tile image into an editable full-page pattern, reaching active user base of over 15,000 designers.
- Curated 150k+ images for AI training through a sitemap-driven scraping and filtering pipeline (JS + Python)
- Built a modular backend image-processing system, applying edge adjacency checks to eliminate non-seamless tiles, enhancing dataset integrity for better AI model training.
- Boosted the company's release cycle by 5 times by designing/using task-specific Claude sub-agents and MCPs
- Designed fail-safe mechanisms (checkpointing, retries, resumable runs) that cut pipeline failures by 95%

DESIGN TEAMS

Software Infrastructure Lead

Feb. 2026 - Present

WatArrow (UW SAE Aero Design) | Directus, DigitalOcean, Postgres, Redis, SSO

Waterloo, ON

- Infrastructure lead for the team's internal platform, maintaining a Directus-based portal on DigitalOcean

Machine Learning Engineer

May. 2026 - Present

WatStreet (UW Quantitative Finance) | PyTorch, NumPy, Graph Neural Networks

Waterloo, ON

- Implementing the graph-attention module (learned additive attention) in PyTorch for a GAT+LSTM model forecasting S&P 500 volatility contagion, producing the weights used to trace which stocks drive others.

PROJECTS

Whisper4Windows | *Rust, Tauri, Python, CUDA, C++, WebRTC*

- Developed a GPU-powered dictation app that transcribes 30s of speech in under 1s via model caching.
- Cut model-loading failures caused by hardware misalignment by gracefully degrading to CPU inference.

AutoCAD Claude

- Integrated Claude with AutoCAD through an in-process .NET 8 plugin (managed ObjectARX) that exposes a localhost JSON protocol, giving the AI clean tool-style calls into the live drawing.
- Made the agent verify geometry visually at each stage to check that elements appear properly before continuing

COMPETITIONS & CERTIFICATIONS

Canadian Computing Competition - Senior (Top of school), PEO High School Coding Contest - (1st Place)

UmmahHacks, AWS Cloud Practitioner Certificate (ongoing), PEO Mathletics Competition - (1st Place)