David Holcer

U.S. / Canadian Citizenship | & (438) 509-4237 | \boxtimes david@davidholcer.com in davidholcer | O @davidholcer | davidholcer.com Native English, Spanish. Professional Working French

EDUCATION

McGill University December 2024

Bachelor of Science in Mathematics and Computer Science

• Relevant coursework: Database Systems, From Natural Language to Data Science, Introduction to Data Science, Software Design, Principles of Web Development, Algorithm Design

Experience

Documentation Engineer

Jan. 2025 – Present

McGill University

Montreal, QC

- Designed clear documentation to support onboarding and effective use of internal research infrastructure.
- Developed and maintained testing libraries, example bots, and bot detection Python scripts to demonstrate tooling usage and accelerate adoption across teams.

Data Science Researcher

Sept. 2024 – Dec. 2024

McGill University

Montreal, QC

- Innovating novel next-generation techniques for social media bot creation and detection supervised by Professor Derek Ruths. Research Paper Link.
- Harnessing Artificial Intelligence techniques using prompt engineering and fine tuning of LLMs. Tech stack: Python, Docker, Hugging Face API, Open AI Completion API, Llama LLM.

Creative Coding Lecturer

Jan. 2023 - May 2023, Jan. 2025

McGill University

• Teaching 50+ university students creative coding through 10 immersive workshops and a personal portfolio of interactive digital art projects. Partnered with ChengHuai Art and Culture Association.

Mathematics & Computer Science Tutor

Jan. 2020 – Dec. 2024

McGill University

Montreal, QC

- Led 20+ students to academic success through individualized tutoring sessions.
- Courses Taught: Calculus, Linear Algebra, Introduction to Computer Science.

Software Developer

Sept. 2019 - Dec. 2019

McGill Artificial Intelligence Society Machine Learning Bootcamp

Montreal, QC

- Performed sentiment analysis of published news articles using NLP techniques. Project link.
- Tech stack: Python (Pandas, Numpy, Tensorflow, cv2, Sklearn, Seaborn), IBM Watson.

Selected Projects

Deco | Elevenlabs, Typescript, Neo4j, React, Vercel

Website Link

- Co-created an AI-driven platform making interior design accessible through conversational experiences.
- Developed a structured data extraction pipeline from product information using Neo4j and data scraping tools to tailor product recommendations to each user.

StoryWeaver.ai | co:here API, React, Next.js, p5.js, Tailwind CSS, Javascript

Website Link

 Generated personalized, unique, and engaging text narratives utilizing LLMs; designed a modern front-end website and a dynamic generative art piece.

TECHNICAL SKILLS

Coding Languages: Java, Python, C/C++, JavaScript, SQL, TypeScript, OCaml, HTML/CSS, OpenGL

Frameworks: React, Node.js, Next.js, Tailwind CSS, Bootstrap

Developer Tools: Docker, Git, Familiarity with cloud platforms including AWS,

Familiarity with Relational and Graph Databases including MySQL, GraphQL, Neo4j, MongoDB

AI/ML Tools: PyTorch, OpenAI APIs, LLM pipelines, Elevenlabs

Libraries: Pandas, NumPy, Matplotlib, Sklearn, Seaborn, P5.js

Skills: Generative AI, Machine Learning, Data Science, Database Management, Data Pipelines, Prompt Engineering,

Conversational Interfaces, API Integration, Public Speaking, Communication, Research, Unit Testing