

Alexander Eckardt

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EDUCATION

McMaster University | **3.8/4.0 GPA (Dean's Honour List)** | Sept. 2021 – May 2025 (Exp)
3rd Year of Bachelor of Applied Science in Computer Science (Co-op) | Hamilton, ON

Google IT Automation with Python | Apr. 2021
6 Course Certification - including "Configuration Management", "Automating Real World Tasks" | Coursera

TECHNICAL SKILLS

Programming Languages: Python, JavaScript, GML, HTML/CSS, L^AT_EX, Java, C#, SQL, C/C++
Development Tools: Azure, git/Github, Google Cloud, Firebase, Supabase, Linux, Docker, Figma, Jupyter
Frontend Frameworks: Bootstrap, ReactJS, Node.js, Astro, WordPress, SwaggerAPI
Libraries: NumPy, Pandas, SQLite, Matplotlib, NLTK, scikit-learn

WORK EXPERIENCE

Operations Lead | May 2023 – Dec. 2023
Orbital Quantum | Toronto, ON

- Spearheaded and managed software development operations, leading the establishment of 5+ robust back-end systems for the company's applications using **Python, Javascript** and **Bash**.
- Designed and implemented intuitive automation tools utilizing full-stack development techniques, streamlining various administrative tasks and leading to **50%** increase in administrative productivity.
- Utilized Artificial Intelligence to expedite patent drafting processes, resulting in a **40%** reduction in costs by minimizing the need for lawyer consultations.
- Modernized and enhanced company web applications to integrate seamlessly with **Google Firebase** for advanced user authentication and data management capabilities.
- Represented the company in the prestigious *Creative Destruction Lab* program, fostering valuable industry connections and gaining deep insights into cutting-edge technologies, particularly in the realm of quantum sensing.

Junior Software Engineer | June 2022 – Sept. 2022
Yarowa (formerly JAROWA AG) | Zug, Switzerland

- Engineered and deployed robust and customizable anonymization algorithms within **12** weeks to clean sensitive customer data for machine learning applications.
- Conducted data pre-processing using **Python** and Microsoft **Excel** to enhance data quality of over **3000** transactions for analysis.
- Met week-based time frames to have anonymization service's **20+** RESTfull APIs deployed into production.
- Collaborated within **Agile** framework, optimizing for communication, documentation, teamwork and project delivery skills.

Teaching Assistant | Sept. 2023 – Dec. 2023
McMaster University | Hamilton, ON

- Assisted in the instruction of courses *Introduction to Programming and Binding Algorithm Theory to Practice*.
- Prepared and conducted weekly tutorials and labs, ensuring students grasped fundamental programming concepts
- Managed **4** exam logistics and marking of **9** assignments.
- Provided one-on-one support for **over 200** students during weekly office hours.

PROJECTS

Waterloo Hybrid Tech | Online directory of over tech companies in Waterloo Region | Jan. 2023
Google Project IDX, Firebase, Supabase, Git, HTML, JavaScript

- Worked on Full-stack Development of tool using **3** new technologies and software design principles to ensure modularity and extensibility.
- Ensured UX design principles were followed to enhance the overall user experience.
- Implemented robust search functionality with **19** filtering options, allowing users to find specific companies.

Pinball Pioneer | Indie Video Game Winner of the GMTK 2023 Game Jam | July 2023
GMS2, Aseprite, Git, Audacity, Web Design

- Solo-developed a puzzle game in entirety within **48 hours**.
- Finished *7th out of 7000 (Top 0.1%)* submissions.
- Envisioned, designed, built and tested all game systems, assets and over **10** levels.
- Created captivating web-page to market and highlight game play features for week long voting period.