Tom Guo

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SUMMARY OF QUALIFICATIONS

- **Languages**: Python, TypeScript, JavaScript, C, HTML/CSS, R, Racket
- **Technical tools**: React, MongoDB, Node.js, PyTorch, NoSQL, Figma, Microsoft Power BI, Excel, LaTeX,
- Excellent interpersonal communication skills nurtured through past work experience and relevant courses.
- Flexible and quick learner developed through successful completion of rigorous academic programs.

WORK EXPERIENCE

Machine Learning Research Intern　　　　　　　　　　　　　　　　　　　**Hamilton, ON**
McMaster University　　　　　　　　　　　　　　　　　　　　　　　　　*May 2023 - Present*
- Conducted research on a project focused on leveraging machine learning algorithms to diagnose eye diseases through comprehensive analysis of retinal images.
- Assisted in conducting data analyses, generating summaries and reports to support project development.
- Designed and deployed a robust machine learning model utilizing *Python*, *PyTorch*, and *Pandas*, to first standardize the retinal images and then accurately evaluate their quality.
- Collaborated closely with researchers and project staff to enhance the machine learning model's performance and contribute to the overall research objectives.

Software Developer　　　　　　　　　　　　　　　　　　　　　　　　　**Waterloo, ON**
CYNORIX Inc.　　　　　　　　　　　　　　　　　　　　　　　　　　*Sept 2022 - Dec 2022*
- Full-stack mobile application development for investment-focused social media project.
- Developed and implemented features including a feed, authentication process, and profile setup pages for a cross-platform mobile app using *React Native* and *TypeScript* for front-end development, and *Node.js* for back-end development.
- Implemented Firebase authentication for user login and registration.
- Implemented a database using *MongoDB* to store user data and facilitate real-time data rendering.
- Created intuitive and robust UI/UX with *Figma* for company investor presentations.
- Wrote and deployed multiple parsers using *pandas* and *Tesseract OCR Engine* to create a functional pipeline that accurately extracts information from annual statements and stores them in a *PostgreSQL* database.

Co-founder　　　　　　　　　　　　　　　　　　　　　　　　　　　　**Calgary, AB**
COVID-19 Care and Support Fundraiser　　　　　　　　　　　　　　　*Apr 2020 - May 2020*
- Demonstrated exceptional organization skills by setting up a fundraiser aimed towards raising money for the McKenzie Towne Retirement Home by Newland Senior Service Centre during the beginning of the COVID-19 pandemic.
- Marketed the fundraiser by creating a comprehensive website resulting in $1,000 in student donations.
- Displayed leadership by connecting with the community through multiple social media platforms to gain awareness.

PROJECTS

Chatty WebApp | JavaScript, React, HTML/CSS
- Utilized the Firebase platform to develop a real-time web browser chatting app with a small cohort.
- Experimented with frontend frameworks and successfully implemented an easy-to-understand user messaging interface.
- Effectively communicated with team to organize and allocate roles to ensure efficiency.

Wordle Game and Solver | Python
- Developed a simple, easy to play version of the Wordle game in the terminal.
- Implemented dictionary searching algorithm using list data structures to create an efficient solver.

EDUCATION

University of Waterloo　　　　　　　　　　　　　　　　　　　　　　　**Waterloo, ON**
Mathematical Finance　　　　　　　　　　　　　　　　　　　　　　　*Sept 2021 – May 2026*
- Candidate for Bachelor of Mathematics
- Recipient of President's Scholarship