

# Michael Ferreira

416-234-9266 | [michaeljf.2007@gmail.com](mailto:michaeljf.2007@gmail.com) | [linkedin.com/in/michael](https://linkedin.com/in/michael) | [github.com/michael](https://github.com/michael) | [michaelferreira.me/](https://michaelferreira.me/)

## EDUCATION

<b>University of Waterloo</b> <i>Bachelor of Computer Science</i>	Waterloo, ON Sept 2025 – Apr 2030
<b>Wilfrid Laurier University</b> <i>Bachelor of Business Administration</i>	Waterloo, ON Sept 2025 – Apr 2030

## EXPERIENCE

<b>Software Engineering Intern</b> <i>Local Reach</i>	Nov 2024 – Mar 2025 Kingston, ON
<b>Charity CEO and Lead Developer</b> <i>Baobab</i>	Dec 2024 – Aug 2025 Toronto, ON
<ul style="list-style-type: none"><li>Refactored the website to leverage SSR and SSG techniques, reducing client-side bundle size by 68% and improving initial page load time from 2.8s to 0.9s.</li><li>Developed YOLO computer vision pipeline for automated TV display recognition in retail stores, achieving 30+ FPS throughput with sub-500ms latency through OpenCV preprocessing; technology acquired by Taiv (YC W20)</li><li>Engineered a neural network audio classifier using MFCC, mel-spectrogram, chroma, and tonnetz features using librosa, achieving 92% accuracy with a 3-layer dense architecture optimized through 64-epoch training</li></ul>	

## PROJECTS

<b>Sublet Centre</b>   <i>TypeScript, Next.js, PostgreSQL, Supabase, Docker, TailwindCSS</i>	Nov 2025 – Present
<ul style="list-style-type: none"><li>Built a full-stack subletting platform to support 100+ listings, targeting off-campus student housing</li><li>Implemented secure authentication and role-based access control using Supabase Auth</li><li>Used denormalization in PostgreSQL schema to manage listings and user data, while reducing query latency</li><li>Developed server-side rendered search and filtering features, improving SEO performance and reducing initial page load time by 250%</li></ul>	
<b>Forex Predictor</b>   <i>Python, Scikit Learn, Pandas, NumPy, Matplotlib, YFinance</i>	Sept 2025 – Dec 2025

<b>Baobab Charity Website</b>   <i>TypeScript, MongoDB, React, Next.js, Git</i>	Apr 2024 – Aug 2025
<ul style="list-style-type: none"><li>Developed a full-stack MERN platform for charitable donations used by 10+ organizations, implementing responsive layouts, dynamic routing, and modular React components with a scalable backend architecture</li><li>Designed and implemented secure user authentication and session management using bcrypt to support 80+ concurrent user accounts, ensuring data integrity and protection against XSS and CSRF</li><li>Built a real-time wishlist system enabling charities to create, update, and track 250+ requested items using dynamic state management, improving donation transparency</li></ul>	

## TECHNICAL SKILLS

<b>Languages:</b> TypeScript, Python, JavaScript, Racket, C, HTML/CSS, SQL (Postgres)
<b>Frameworks:</b> React, Node.js, Django, Next.js, TensorFlow, TailwindCSS
<b>Developer Tools:</b> Git, Docker, VS Code, Visual Studio, PyCharm, Chrome DevTools
<b>Libraries:</b> pandas, NumPy, Matplotlib, BeautifulSoup, Axios, Scikit Learn, OpenCV, librosa