Toronto, ON | jacob.fu@uwaterloo.ca |

linkedin.com/in/fujacob

JACOB FU

github.com/fujacob fujacob.us

TECHNICAL SKILLS

Programming Languages Frameworks/Libraries **Tools/Technologies**

Python, Java, JavaScript/TypeScript, HTML/CSS, SQL, C, Bash, PowerShell React, Node.js, Express.js, Next.js, Django, MongoDB, PostgreSQL, Tailwind CSS Git, GitHub, Docker, AWS, GCP, Postman, Firebase, Jupyter Notebook, JIRA, Figma

PROFESSIONAL EXPERIENCE

Software Developer

PetMap – UC Berkeley Startup

- Developing a platform using Firebase, Express, React, Node with TypeScript to connect dog lovers and owners.
- Implemented a real-time map interface using Google Maps API and proximity algorithms for location-based user matching.
- Collaborating on development in Agile sprints within an 8-person team, implementing CI/CD practices and code reviews.

Digital Media & Marketing Intern

1000 Islands Gananoque Chamber of Commerce

- Redesigned website by optimizing navigation and layout, boosting weekly visitors by 65% and session duration by 120%.
- Produced 60+ promotional assets and videos, driving 500+ impressions per video and supporting 2+ marketing campaigns.
- Optimized Mailchimp email campaigns through A/B testing and refining email designs, increasing click rates by 60%.

Information Technology Intern

Weehooey

- Developed a JavaScript web app to automate employee bonus calculations, saving a client 7+ collective hours per month.
- Improved server maintenance process by automating log reporting via **PowerShell**, reducing labor by **30+** minutes daily.
- Monitored and managed **30+** client servers daily, proactively reporting and resolving security issues to reduce downtime.

PROJECTS

🔗 🗘 RBveal | JavaScript, Next.js, React, Express.js, Node.js, Tailwind CSS |

- Won First Place for RBC's Sponsor Prize among 550+ participants at University of Toronto's UofTHacks 2025 Hackathon.
- Created a phishing simulator with dynamic emails via Nodemailer, banking UIs remade with React, and AI call-agents.
- Built a real-time AI call system using **WebSockets**, **Twilio**, **OpenAI**, and **Deepgram** for conversations with **<2s** latency.

🔗 🖓 FairFi | JavaScript, Next.js, React, Express.js, Node.js, MongoDB, Tailwind CSS |

- Won NSBE X P&G Fintech Sponsor Prize among 640+ participants at McMaster University's DeltaHacks 2025 Hackathon.
- Built a web app using Twilio and Cohere to detect employee bias using AI customer calls, storing data in MongoDB.
- Developed a bias visualization dashboard, allowing real-time analysis of sentiments using Cohere's Command R+ Model.

🔗 🗘 AnonAlyze | JavaScript, Next.js, React, Express.js, Node.js, Tailwind CSS |

- Won Best Security Hack among 240+ participants at York University's CTRL+HACK+DEL 2024 Hackathon.
- Created a full-stack web app using OpenAI and Apify APIs for data and analysis to identify users' privacy vulnerabilities.
- Designed RESTful API endpoints with Node.js and Express.js for social media data processing and privacy insights.

🔗 🖓 MelodyVe | JavaScript, Next.js, React, Express.js, Node.js, MongoDB, Tailwind CSS |

- Created a full-stack web app to analyze users' musical compatibility using **Spotify** and **OpenAI** APIs for data and analysis.
- Built REST APIs with Node.js and Express.js, reducing data processing latency by implementing efficient request handling.
- Designed MongoDB database with NextAuth.js OAuth authentication for user sessions with report storage and retrieval.

EchoBl 🔗 🗘 | Python | HTML/CSS | Django | PostgreSQL | SQLite

- Developed a discussion platform using **Django** and **Python** enabling users to create real-time topic-based debate rooms.
- Built complete user system with authentication, profiles, and messaging using **Django auth** and **SQLite** database.
- Scaled application through PostgreSQL migration and Render cloud deployment, implementing secure database.

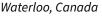
EDUCATION

University of Waterloo

Honours Bachelor of Computer Science and Financial Management

- Awards: Robert Harding Entrance Scholarship (\$5000), President's Scholarship of Distinction (\$2000)
- Relevant Courses: Designing Functional Programs, Financial Markets & Data Analytics, Algorithm Design & Data Abstraction, Tools & Techniques for Software Development.

3.94/4.00 GPA



Jun 2024 – Sep 2024

Jan 2025 – Apr 2025

Remote

Gananoque, Canada

Oct 2023 - Jan 2024 Kingston, Canada