

JACOB FU

✉ jacob.fu@uwaterloo.ca | in linkedin.com/in/fujacob | GitHub github.com/fujacob | 🖥 jacobfu.vercel.app

EDUCATION

University of Waterloo

2024 - 2029

(BCFM) Computer Science and Finance – Cumulative GPA: 3.94/4.00

Waterloo, ON

Awards: Robert Harding Entrance Scholarship (\$5000), President's Scholarship of Distinction (\$2500)

Relevant Coursework: Functional Programs, Financial Markets & Data Analytics, Algorithm Design & Data Abstraction

TECHNICAL SKILLS

Languages: JavaScript, Python, Java, HTML/CSS

Frameworks & Tools: React, Node.js, Next.js, Express.js, TailwindCSS, Pandas, NumPy, Git, Figma

EXPERIENCE

Digital Design Intern

Jun 2024 – Sep 2024

1000 Islands Gananoque Chamber of Commerce 🌐

Gananoque, ON

- Redesigned website to improve usability and design, increasing **weekly visitors by 65%** and **session duration by 120%**.
- Created and designed **50+ social media assets**, using **Adobe Photoshop** and **Canva** to support marketing campaigns.
- Edited high-quality promotional social media videos using **Adobe Premiere Pro**, driving **500+ impressions per video**.

IT Solutions Intern

Sep 2023 – Feb 2024

Weehoey 🌐

Kingston, ON

- Developed a web-app using **JavaScript** and **HTML/CSS** to calculate client employee bonuses, used by **100+ employees**.
- Improved Weehoey's server maintenance script by automating the delivery of server analytics to IT using **PowerShell**.
- Managed **30+ client servers'** system and security health, proactively identifying and resolving potential issues.

Indie Game Developer

Jun 2019 – Apr 2022

Self-employed 🌐

Kingston, ON

- Developed an online zombie-tag .io game using **modd.io editor**, **HTML/CSS**, and **JavaScript**, hosted on **modd.io** servers.
- Amassed **200+ concurrent players**, **4.2M+ total plays**, **250K+ unique players**, and reached virality with **570k+ views** 📺.
- Implemented monetization through Patreon subscriptions and micro-transactions, ultimately generating **\$2,500+ CAD**.
- Led a team of 3 developers to deliver weekly content updates including new maps events, items, and gameplay features.

PROJECTS

MelodyVe | JavaScript, HTML/CSS, Next.js, Express.js, React, MongoDB, OAuth | 🌐

- Created a full-stack web app using **Spotify and OpenAI APIs** to analyze users' musical affinity with custom scoring methods.
- Developed an **algorithm** that generates curated playlists based on listening data to allow for users' music exploration.
- Implemented **secure OAuth authentication** using **NextAuth.js** and **Spotify provider** to enable user login and data access.
- Designed **MongoDB schema** to store user profiles and reports, enabling persistent data access and historical analysis

AnonAlyze | JavaScript, HTML/CSS, Next.js, Express.js, React | 🌐

- Won **Best Security Hack** at York University's **CTRL+HACK+DEL Hackathon**.
- Developed a full-stack web app using **OpenAI API** and **Apify API** to analyze a user's social-media online security.

Robo Investment Portfolio Advisor | Python, Pandas, NumPy, yfinance | 🌐

- Built a program to recommend high-risk, high-reward stock portfolios based on a list of stocks.
- Developed a Python algorithm to effectively identify stocks with a high likelihood of outperforming the market.
- Cleaned and processed historical stock data using **Pandas** and **NumPy** before analysis.

Novel Novels | JavaScript, HTML/CSS, React, Figma | 🌐

- Built a full-stack web app that converts novels into picture books using images generated by **Pollinations AI**.
- Designed the website's user interface using **Figma**, ensuring a visually appealing, user-friendly layout before development.