

# Junxuan Bao

Honours Computer Science Co-op Student

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## Profiles

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## Highlights of Qualifications

**Third-year Honours Computer Science student** at McMaster University with 3.93/4.00 GPA.

**Certified Cloud Expert** with over 7 years of full-stack web development experience, specializing in building scalable and user-focused applications.

**Entrepreneurial leader**, successfully founding and scaling a company from inception to a profitable business, achieving **\$400,000 in annual revenue**.

**Proven expertise** in designing and implementing efficient workflows and systems that streamlining operations to enhance productivity.

## Experience

### Resiliō Climate Solutions

May 2025 - August 2025

Software Development Intern

Hamilton, ON

Redesigned company website independently using **Astro**, resulting in a **400%** improvement in overall site performance—including faster load times, better **SSO** integration, and enhanced maintainability.

Built a **full-stack** SaaS environmental risk warning system using **React** and **Express.js** in a **monorepo** architecture, fully integrated with an internal **Learning Machine** for real-time **risk analysis**.

Implemented **TSOA** to structure Express.js APIs with **OpenAPI**-compliant annotations, and deployed **Swagger** UI for streamlined, self-documenting developer workflows.

### McMaster University

March 2025 -September 2025

Communications Assistant 2A

Hamilton, ON

Automated research funding approval workflows with **Microsoft Power Automate**, reducing manual processing by 90%. Edited and maintained content on **WordPress** to ensure up-to-date information.

### Envoy Hamilton

Sep 2024 - Present

Software Engineer

Hamilton, ON

Designed and implemented a 24-hour smart parcel locker system with the goal of generating **\$10,000** in annual revenue per site.

Improved user convenience by eliminating delivery time constraints, utilizing **React**, **Express.js**, and **MySQL** to create a robust and user-friendly system.

Developed an integrated smart lock mechanism using **ESP32** microcontroller and **Arduino (C++)** to enable real-time locker access control.

### ESH Group

Sep 2017 - Present

General Manager / Head of Internal Software

Remote

Led the growth of a **UGC gaming content company** from early operations to **\$400,000 in annual revenue**.

Managed **finance**, **HR**, **taxation**, and **global partnerships** as **General Manager**, while also **developing internal systems** (CRM, ticketing, finance tools, login) that **increased efficiency** by 6×, **reduced response time** to 24 hours, and **improved productivity** by 40%.

Education	<p><b>McMaster University</b>            Computer Science            3.93 / 4.00 GPA</p> <p><b>Dean's honour list / Co-op Global Experience Scholarship</b></p> <p>Core Courses: <b>Data Structures &amp; Algorithms, Software Design, Databases</b>, etc.            Elective Courses: Physics, Economics, Sustain, etc.</p>	<p><b>Aug 2023 - May 2027</b>            Bachelor of Applied Science</p>
Projects	<div> <p><b>Half Biz.</b> <span>Dec 2024 - Present</span></p> <p>Launched a business tool with features including loyalty programs, self-delivery systems, and online ordering, built using <b>PostgreSQL, Redis, React, and Express.js</b>.</p> <p>Projected to save family-owned restaurants <b>\$2,760 annually</b> by reducing software costs from \$3,000 to \$240.</p> <p>Gained adoption from over a dozen small businesses within a week of its rollout.</p> </div> <div> <p><b>Full-Stack Developer Course</b> <span>Sep 2024 - Present</span></p> <p>Designed and delivered a free full-stack development course to empower university students to complete their first projects using modern technologies.</p> <p>Created and published comprehensive tutorials covering front-end development with <b>TypeScript and React</b>, ensuring accessibility for beginners.</p> <p>Implemented real-world examples using <b>Express.js and PostgreSQL</b> to bridge the gap between theoretical knowledge and practical application.</p> </div> <div> <p><b>EaseCation User Service System</b> <span>Jul 2024 - Present</span></p> <p>Developed a <b>serverless</b> system with 99.99% uptime using <b>MySQL, React, and Express.js</b>, integrating platform APIs to automate manual operations.</p> <p>Enhanced user response rates from 25% to 100%, enabling 35% of work orders to be resolved automatically within a minute through <b>AI-powered autoresponders</b>.</p> <p>Ongoing maintenance is underway to <b>serve tens of thousands of users</b>.</p> </div> <div> <p><b>EaseCation Office Automation System</b> <span>Jan 2021 - Dec 2024</span></p> <p>Streamlined resource requests, with <b>70% of approvals now fully automated</b> and remaining requests reviewed within 24 hours, down from 2–3 days.</p> <p>Enhanced employee satisfaction by removing process bottlenecks, enabling faster task completion without delays caused by lengthy audits.</p> </div>	
Skills	<p><b>Programming Languages:</b> TypeScript (JavaScript), MySQL, PostgreSQL, PHP, Java, HTML, CSS</p> <p><b>Frameworks &amp; Tools:</b> React, Express.js, Astro, Serverless, Cloud computing (AWS, etc.), tsoa, Git, Docker, monorepo, CI/CD Pipelines, Power Automate, OpenAPI, Swagger, RESTful API, Linux, Spring Boot, Next.js, Vue.js, WordPress</p> <p><b>Technical Skills:</b> UX Design, UML Modeling, Figma, SDLC frameworks, Agile Development, Game Design, Client Communication, MS Office</p> <p><b>Business &amp; Administrative:</b> Team Leadership, Tax Compliance, Project Management</p>	