

Angus Sun

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EDUCATION

University of Waterloo

BSE Honours Software Engineering

Relevant Coursework: Programming Principles, Introductions to Methods of Software Engineering, Introduction to Data

Abstraction and Implementation

Waterloo, ON

Sept. 2025 – Apr. 2030

EXPERIENCE

Software Engineer Intern

Falcon Technologies

Feb. 2025 – Aug. 2025

Vancouver, BC

- Built a subscription tracker (**Next.js**, **PostgreSQL**, **Prisma ORM**) supporting **10,000+** monthly transactions
- Implemented secure authentication (**OAuth + credentials**) and responsive UI with **Tailwind CSS**
- Developed **RESTful APIs** and containerized database with **Docker**, reducing deployment time by **60%**

Robotics Instructor

Fleetwood Robotics

Jul. 2023 – Sept. 2023

Surrey, BC

- Instructed **20+** students ages 4-15 in robotics, physics and programming fundamentals
- Managed hands-on learning environments with robotics kits and sensors while ensuring safety protocols
- Developed curriculum combining robotics theory with practical programming applications

PROJECTS

Squat Showdown

Award-winning AI fitness game

[/squat-showdown](#)

[squat-showdown.vercel.app](#)

- Developed a custom model and state machine to detect real-life squats on camera using **MediaPipe**
- Built **Express** backend leveraging **WebSockets** to synchronize game state across browsers
- **Best AI Hack** at Boost Hacks II hackathon (**1200+ participants**)

Skync

Real-time collaborative whiteboard

[/skync](#)

[skync-frontend.vercel.app](#)

- Developed a multi-user whiteboard with real-time drawing, image, and text collaboration via WebSockets
- Built a **Socket.IO** backend to synchronize user actions across clients in real-time
- Implemented custom canvas logic for drawing, images, text, selection, resizing, and undo/redo
- Designed a modular UI with dynamic toolbars and color pickers using **React hooks** and CSS modules

Nanopeas Website

Custom e-commerce site for non-profit

[nanopeas.vercel.app](#)

- Developed full-stack e-commerce platform for Vancouver nonprofit with responsive UI architecture
- Integrated **PayPal API** with automated fee computation and transactional order-processing backend
- Implemented client-side shopping cart with **localStorage** persistence and real-time inventory control
- Responsive CSS with mobile-supported design, image sliders, dynamic cart updates

Chess Climb

Interactive chess-based puzzle game

[/chess-climb](#)

- Developed Interactive chess-based puzzle game using **Python** and **SimpleGUI** framework
- Implemented object-oriented design patterns for audio systems, UI component, game entities
- Designed collision detection, movement validation, and an interactive tutorial

TECHNICAL SKILLS

Languages: Java, Python, C/C++, SQL (Postgres), JavaScript, Typescript, HTML/CSS, Tailwind CSS

Frameworks: React, Node.js, Next.js, Express

Developer Tools: Git, Docker, Vercel, Render, Prisma ORM, OAuth