

# **LIAM J. TRUSS**

Cambridge, ON | N1T 1E6 | ltruss2003@gmail.com

## **EDUCATION:**

**Western University - BSc. Honours Specialization in Computer Science, Minor in Game Development, Science Internship Program.**

**September 2021 to Expected Graduation in 2026**

- 2022-2023, 2023-2024 Dean's Honour Roll
- Relevant courses: Computer Networks, Game Programming and Design, System Programming, Object-Oriented Design and Analysis, Internet Algorithmics, Machine Learning / AI
- Completed a 16-month co-op placement

## **NOTABLE PROJECTS:**

### **Rock 'N' Roll Star - Unity Game:**

**Western University - December 2025**

- A 3D beat 'em up game developed in Unity featuring score-based progression and exploration objectives where players locate missing records while defeating enemy guards
- Implemented a real-time combat system with player special abilities and diverse enemy behaviors
- Designed enemy AI using Unity NavMesh navigation, enabling dynamic pathfinding, player chasing, and responsive combat engagement
- Integrated audio, music, and language localization systems, supporting consistent game settings and multilingual gameplay across English and French

### **WesternGIS**

**Western University - April 2023**

- Mapping system for viewing building floor plans around Western's campus. Built using Java.
- User can view/create/delete highlighted points on the map of buildings
- Implemented a JSON-based system to manage and store persistent application data
- Built a user-friendly GUI with Java Swing

### **Snake Game with networking:**

**Western University - December 2023**

- Built a client-server architecture on top of an existing 'Snake' Pygame project, enabling multiple players to connect over a local network and play through a central host server
- Added an in-game chat feature secured with RSA encryption
- Used multithreading to keep gameplay smooth, handle network traffic and chat in the background.

## **WORK EXPERIENCE:**

### **IO Industries: Software Development Intern**

**May 2024 to August 2025**

- Completed a 16 month work term as part of the Western Science Internship Program
- Designed and developed cross-platform desktop applications (Windows/Linux) in C++ to interface with high-speed video recording hardware
- Developed independent projects, including a custom transcoding library for converting sequences of raw image data to MP4 video and a lightweight RTSP video viewer
- Leveraged industry-standard libraries including Qt, Boost, Intel IPP, OpenCV, and FFmpeg to implement performant solutions

- Debugged and optimized code to maintain high standards of quality, efficiency, and adherence to company coding guidelines
- Reproduced and resolved customer-reported issues, ensuring timely bug fixes and reliable software performance
- Managed the Linux release of the StudioCap software suite, including building installers and addressing platform-specific issues

**Westrock Packaging: Production Intern**

**April 2023 to September 2023**

- Packaged high levels of cardboard and paper products
- Prepared machinery for incoming orders and altering mechanisms as necessary
- Performed quality checks to ensure all finished products met company and customer standards
- Completed factory safety and WHMIS training, maintaining a safe work environment

**African Lion Safari (Shift Lead Supervisor) April 2022 to September 2022 (Seasonal)**

- Promoted to Supervisor after progressing from Team Member to Crew Chief over several years, demonstrating strong performance, leadership, and reliability
- Supervising approximately 50 employees in a day, ensuring employees are completing responsibilities and working well with one another
- Ensuring all employees are trained and using kitchen equipment according to health and safety procedures
- Taking daily/ weekly inventory counts along with keeping track of deliveries received
- Checking all opening and closing procedures are followed at each restaurant location
- Closing the restaurant for the night, ensuring all doors are locked and equipment off
- Handing out and keeping track of all cash boxes for the day
- Managing and responding to customer complaints
- Led and coordinated team members in a fast-paced kitchen environment to efficiently prepare and complete customer orders
- Obtained City of Hamilton Food Safety and Ontario Smart Serve certificates

**SKILLS:**

- Proficient programming skills in Python, Java, C/C++/C#, JavaScript and more
- Working with command-line tools, version control and build systems
- Experience developing and debugging software in both Linux and Windows environments, including cross-platform testing and deployment
- Writing and following API documentation to integrate and extend software functionality
- Building 2D, 3D and VR games using the Unity engine
- Team-based software development, from planning through implementation
- Great understanding in programming logic and problem-solving
- Great organizational and time management skills
- Leadership experience
- Excellent communication skills and customer service