**ALEX IMBERT**

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**EDUCATION**

**Carleton University & Algonquin College Expected Graduation:** April 2028

*Bachelor of Information Technology, Interactive Multimedia and Design*

*5-Year Co-Op Program*

* Third-year standing, CGPA 10.65/12(A-)
* Academic Scholarship: 2023/2024, 2024/2025, 2025/2026

**SKILLS**

* C/C++
* Python
* PHP
* JavaScript
* HTML/CSS
* Django
* Git/GitHub
* React
* SQL
* French

**WORK EXPERIENCE**

**Programming Instructor – Code Ninjas June 2025 – August 2025**

*Stouffville, Ontario*

* Taught programming fundamentals to summer school students using Python and JavaScript
* Guided students in building robotics projects, games and other coding related projects with emphasis on teaching both coding skills and critical problem solving
* Taught concepts in a presentation style to groups of 20+ and provided 1 on 1 guidance for troubleshooting code

**Self Employed – Student Power Washing & Restoration Services June 2024 – August 2024**

*Uxbridge, Ontario*

* Marketed power washing and wood restoration services door-to-door, securing a large job that grew into a series of other projects
* Developed strong marketing skills through frequent client interaction and careful planning of tasks resulting in jobs being completed within the promised timeline
* Delivered high-quality results showcasing responsibility and good time management skills that resulted in satisfied customers

**APPLIED PROJECTS**

**Full-Stack Developer |** **StrumUp Django/Python** | **HTML/CSS** | **React/JavaScript**

* Interactive web app designed to make learning guitar chords engaging and fun where users can practice identifying chords either visually or by listening to chord sounds
* Developed a backend with a REST API supporting easy backend and frontend communication to manage chord data, and persist user progress, and create JWT tokens for secure session management
* Built a structured frontend in React using reusable components to maintain clean, modular code, leveraging useState and useEffect hooks to simplify logic and improve interactivity
* Delivered a polished final project, showcasing the ability to bridge frontend and backend technologies effectively

**3D Physics Engine C++ | OpenGL**

* Developed a custom 3D physics engine implementing broadphase and narrowphase collision detection, including algorithms such as Sweep & Prune, GJK, and EPA for efficient and accurate collision response
* Applied object-oriented programming principles and low-level memory management to build efficient, scalable systems
* Leveraged linear algebra to simulate realistic motion dynamics, showcasing strong problem-solving and mathematical skills

**Digital Magazine** **| Roll of the Dice HTML/CSS** | **JavaScript**

* Developed a responsive digital magazine website using HTML, CSS, and JavaScript. Required multiple pages, custom styling and must follow accessibility standards. The final website was visually appealing and effectively showcased the magazine's theme
* Coordinated with the group of four to divide responsibilities. Used effective communication skills to create a cohesive design
* Organized and led the presentation, ensuring all group members were properly introduced and the presentation stayed enthusiastic and professional

**LEADERSHIP EXPERIENCE**

**Yearbook Editor**  **October 2022 – June 2023**

*Uxbridge Secondary School, Uxbridge Ontario*

* Collaborated closely with a team of 4 peers to manage and execute the full production of the school yearbook, resulting in the best-selling edition in school’s history
* Took on a leadership role by organizing and teaching a class of 20+ grade 11 students new software tools and techniques, streamlining the yearbook creation process and enhancing overall efficiency