Emily Nguyen

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EDUCATION

- **University of Toronto | Engineering Science |** GPA: 3.5/4.0 .... Graduation 2024
- Awards: Dean's Merit Award ($5,000), President's Entrance Scholarship ($4,400), and the Reginald and Galer Hagarty Scholarship ($600)
- Relevant Courses: Python, Circuits, Digital and Computer Systems, Computer Algorithms & Data Structures

SKILLS

Languages: Python, C, Java, HTML5, CSS3, JavaScript, C#, Verilog, Assembly, MATLAB, SQL
Databases: Microsoft SQL Server, Oracle
Tools: LibGDX, Unity, CATIA, Ansys, AutoCAD, NetBeans

EXPERIENCE

Call of the Bog Game Android App | **Project Leader** .... May 2021 – Present
- Developed game interactivity for a runner action video game using the framework **LibGDX** using **Java**
- Implemented 2D physics engine utilizing forces and spherical collision detection using **Java**
- Worked with a team of 5 to integrate 2D graphical objects incorporating sprites and tile sets using **Krita, Tiled** and **LibGDX** to optimize user experience and interface by testing **over 50 versions**

Maze Game | **Independent Project** .... May 2021 – Jun 2021
- Designed implementations of a maze game using **Unity**
- Programed ability to detect object collisions and game responses using **C#**
- Optimized game mechanics by **40%** creating and tuning content to create accessible interactivity to improve user experience and interface using **Unity**

West End YMCA | Sales Representative .... Sep. 2021 – Present
- Improved customer relations by understanding their requirements, making recommendations, and providing solutions to problems to **150+ clients per day**; Acquired over **10 membership sales per week**
- Efficiently managed information using **Active Net** software including sign-in, client records, and billing with **100% accuracy**

Seam Carving | **C** .... Mar. 2021 – Apr. 2021
- Implemented the seam carving algorithm to resize an image without cropping or distorting its contents; tested with **over 10 images**

Synonyms | **Python** .... Nov. 2020 – Dec. 2020
- Developed an intelligent system to find synonyms with **80% accuracy** by applying the Natural Language Processing Word2Vec method given a 4-option multiple choice test

EXTRACURRICULARS

Blue Sky Solar Racing Design Team | Mechanical Sub-team Member .... Feb. 2021 – Present
- Designed **over 10 mechanical parts** using **CATIA** for the solar racing car including clevises, and brake connections
- Performed finite element analysis on **5+ clevises** via **Ansys** and completed **10+ brake system designs** using **CATIA** to meet World Solar Challenge safety regulations
- Documented over **5 Ansys simulation reports** detailing stress analysis and safety factor to confirm safety to **30+ team members**

U of T Blue and Gold Committee | First Year Executive .... Sep. 2020 – Sep. 2021
- Conducted **3 major social events and competitions** for **5000+ students** in the engineering community
- Engaged students utilizing social media to increase student involvement by **over 50%** in Spirit Week events