Steven Lee

Computer Programmer · Computer Science major - McGill University

514-265-0116 | lee.j.steven@gmail.com | stevenleej.github.io | stevenleej | stevenleej

Skills

Programming Languages C#, Java, Python, SQL, JavaScript, HTML/CSS, Lua, C++
Tools and Technologies Unity Engine, PostgreSQL, OpenGL, ImGui, Git, JUnit4, Blender
Languages English, French, Korean (trilingual)

Work Experience

Undergraduate Research Assistant
Montreal, Canada

McGill University
Apr. 2021 - Aug. 2021

- *Developed visual tools in Python using Tkinter, Dash and NumPy to improve workflow of data scraping and visualization.*
- *Scraped data from thousands of Victorian era newspapers using OCR Tesseract, and classified key themes using LDA Topic Modelling, achieving an accuracy rate of 68%.*
- *Created Twine tutorials and examples for an undergraduate class in development.*

RA - Game programmer
Montreal, Canda

McGill University
Dec. 2020 - Apr. 2021

- *Developed a VR web application using PannellumJS, PixiJS and HTML/CSS, while improving framerate performance by 31% using Chrome's profiler.*
- *Designed and programmed the UI/UX, and implemented gameplay features for a Unity game in C#.*

Projects

Keyframe Animation Tool

3D animation tool written in Java and OpenGL

- *Designed a tool in Java using hierarchical modeling to parse data from XML and render it through the graphics pipeline.*
- *Implemented the ability to freely move joints for shapes in real time.*
- *currently working on using Bezier surfaces, to generate more complex models in various file formats.*

Ubisoft Game Labs - Besunder

Game made with the Unity Engine for Ubisoft's collegiate 10-week game development competition

- *Optimized the game's performance by 25% using Unity's profiler.*
- *Designed and wrote shaders in HLSL to implement reflections and simple cell shading.*
- *Created 3D models and animations using Blender.*

Infinite Hall

A horror game made in Unity, with over 500 downloads on Itch.io

- *Designed enemy behaviour with random heuristics using State Machine design pattern.*
- *Created a Procedural Stairs Generation system featuring randomized game events in C#.*

Antimony

Game created using the Unity Engine for the Global Game Jam, in a team of 6 students.

- *Developed interactivity of scriptable items with the game's environment using Unity's Ray Casting and mouse system.*
- *Implemented a dynamic inventory system capable of taking in keywords from the dialogue as scriptable objects.*

Education

McGill University
Montreal, Canada

Bachelors major in Computer Science - Minor in East Asian Studies
Sep. 2017 - Expected Nov. 2021

Leadership

GameDev McGill
Montreal, Canada

VP GameJam
Apr. 2020 - May 2021

- *Served as the head organizer of McGame Jam 2021, a 48-hour game development hackathon, attracting over 155 developers across North America.*