

Kaitlyn Archambault

Dartmouth, NS • (613) 297-0054 • archambaultkm@gmail.com • archambaultkm.github.io

Software Developer with 1 year of experience in the web sector and a passion for graphics programming and game development. As a former music educator and performer, I have worked extensively in team environments where I developed a solution-oriented approach to my work and strengthened my communication and leadership abilities.

Education

JANUARY 2022 - DECEMBER 2023

Diploma in IT Programming | Nova Scotia Community College | Halifax, NS

SEPTEMBER 2016 - MAY 2020

Bachelor of Music | Mount Allison University | Sackville, NB

Experience

APRIL 2023 - PRESENT

Web Developer | Aptitude Digital | Halifax, NS

INTERNSHIP APRIL 2023 – DECEMBER 2023 | PERMANENT JAN 2024 – PRESENT

- Worked collaboratively with the development team to create Drupal websites for a wide variety of clients.
- Engineered custom Drupal modules to solve complex site requirements using PHP, Twig, JavaScript, MySQL, and more.
- Translated designs into Drupal themes using HTML, SCSS, and JavaScript

JULY 2022 – AUGUST 2022

Technology Intern | Halifax Public Libraries | Dartmouth, NS

- Delivered an afternoon game development session for youth using the Scratch programming language.
- Employed excellent communication skills to offer patrons guidance on technical issues.

NOVEMBER 2020 – FEBRUARY 2022

Term Teacher (Strings) | Halifax Regional Center for Education | Halifax, NS

- Instructed violin, viola, cello at elementary and high school levels, managing classes ranging in size from 1- 40 students.
- Clearly communicated expected lesson outcomes and adapted teaching methods to fit the needs of students.
- Maintained an open line of correspondence with colleagues, school administration, and parents.
- Adapted teaching and communication techniques to accommodate the pivot to online learning during the Covid-19 pandemic in NS.

Technical Skills

Programming Languages: C, C++, Rust, PHP, Java, C#/.Net, SQL, HTML/CSS/SCSS/JS, Python

Other Technologies: Jira, Docker, Git, OpenGL, Drupal, Android, Unity, Godot

Projects

RustWorld | Rust, OpenGL, GLSL, Glutin | Personal Project

A voxel-based terrain generator in the style of 'Minecraft', written from scratch.

- Designed the engine with a clear organizational structure:
 - Core: Manages the game window, loop, and camera functionalities.
 - Creation: Implements chunk and terrain generation, which employs Perlin noise for interesting landscapes.
 - Rendering: Leverages OpenGL to manage shaders, geometry information, and texture handling
- Optimized rendering by incorporating a texture atlas for 'block' types (differentiated using shader uniforms).

The Duopus | Unity, C#, HLSL | Global Game Jam 2024

Controlling a two-tentacled cephalopod, you must traverse a seabed littered with obstacles in a physics-based platformer.

- Designed and implemented a custom overlay shader, written with a combination of HLSL and C# script, to give a rippling water-like effect over the visible scene.
- Contributed to level design: building assets, balancing difficulty.

Rogue Planet | Unity, C# | NSCC Capstone Project

As a space explorer stranded on a strange planet, you collect resources to repair your ship while defending yourself from hostile alien creatures.

- Created different enemy types and wrote varying behavior scripts in C#.
- Designed combat health and damage mechanics.