

Taylor (Twig) Nielsen

Calgary, Alberta

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(403) 510-5828

Portfolio: twigsite.ca

Professional Summary

Capable developer passionately creating accessible and engaging experiences. Highly adaptable, with multi-disciplinary experience: digital art, 3D modeling, rigging, animation, graphic design, audio, game engines, frameworks and programming languages.

Core Skills

- Accessible Design
- Game Development
- Project Management
- Creative Conceptualization
- Peer Mentorship

Education

B.Sc. in Software Engineering

University of Calgary - With Distinction

September 2018 - April 2022

Projects

Curl - Head of Project

October 2022 - April 2023

- Conceived, designed, managed, and executed primary development of a video game that can be played entirely with a Brain-Computer Interface, including gamified model training
- Authored a successful ten page \$20,000 grant proposal to the Calgary Arts Development Authority: schedule, budget, game design, artistic resumes, and supporting material
- Created and documented Unity package integrating BCI support for Emotiv devices
- Created accompanying promotional website teamcurl.ca with React
- Published the project to general audiences in early access on the Steam gaming platform

Game Jams

January 2020 - Present

- Participated in 25+ events as a programmer, artist, mentor, and creative lead
- Worked with groups of two to six, often as a project manager and principal developer

Technologies

- Unity
- Godot
- Blender
- Git
- React
- Node.js
- Docker
- SQL
- CSS

Programming Languages

Proficient

Javascript, C#, GDscript

Familiar

C++, Python, Java

Acquainted

C, Typescript, Lua

More Projects

Wave Pool DX

May - June 2024

- Iterated on a previous project to improve functionality and support new platforms
- Established a multiplatform build process using the low level C++ Raylib framework

Drum Pit

Dec 2020 - Jan 2022

- Self managed a long term development project in the Unity game engine

YUT YUT

October 2018 - July 2019

- Solidified early understanding of software design and development through creative development by replicating and expanding upon an established game concept

Art Prompts Web App

September 2023

- Created and styled responsive front end to display weekly art prompts
- Established back end solution to store and manage text prompts
- Developed password-protected front-end admin interface to manage prompts
- Migrated simple back end hosting to be containerized and portable

Work and Volunteer Experience

Freelance Software Developer

April 2022 - Present

- Worked with clients to discern objectives and deliver relevant solutions

President - Game Design Club

September 2020 - March 2022

University of Calgary Student Organization

- Mentored students in the field of game development using a variety of digital tools

Digital Media Mentor

October 2021 - April 2022 Part-Time

University of Calgary Library and Cultural Resources

- Managed access to library makerspace and other creative multimedia assets

Maintenance Technician

July 2016 - July 2020 Part-Time/Seasonal

Calgary Christian School

- Led team in facility maintenance tasks