# Tyson Moll

Portfolio: tysonmoll.ca

t.moll@outlook.com | Toronto, ON, M4J

#### Technical Skillset

### Programming:

Experienced with C#, JavaScript, Python, MATLAB, Smalltalk, Git, Arduino, GML Proficient with C, C++, Elixir, Java, Assembly (for Altera, ARC, M6809 boards)

## Design Software:

Adobe Suite, MS Office, Rhinoceros 3D w/ Grasshopper, Blender, AutoCAD, Fusion 360

## Education

# Bachelor of Science, Computer Science (B. Sc.)

Expected Graduation: Apr 2022

Ryerson University, Toronto, ON

○ CGPA: 4.14/ 4.33 (A/A+)

## Master of Design, Digital Futures (M. Des.)

Sept 2018 - Apr 2020

OCAD University, Toronto, ON

## Bachelor of Architectural Studies, Design Stream (B. Arch)

Sept 2012 - Apr 2016

Carleton University, Ottawa, ON

# Featured Projects

#### 'Multimodalities in Metadata / Gaia Gate' (Graduate Thesis)

Sept 2019 - Apr 2020

- O Developed a 'multimodal camera' in a modularly-structured Unity (C#) project with Visual Studio that embeds metadata about a location into new and existing photographs using API calls and steganography (Biome, Anthrome, Weather, Celestial Data, etc.)
- O Designed and produced procedural level design algorithms leveraging the images and data
- Researched existing metadata, cryptography, digital media and data representation techniques to develop a proposal for a new format of metadata documenting a digital object's external context dubbed External Contextual Metadata (ECM)

#### 'River Styx', a VR Kayaking Adventure (with S. Juyal and G. Yeboah)

Nov 2018

 Produced an interactive VR Unity game using a selfmade Arduino kayak paddle controller, presented in public exhibition

#### 'Hella Fresh Express' Mobile Game (with B. Moll)

March 2017 & June 2019

- Designed and produced gameplay and vector artwork assets for a browser- and mobile-based memory game in the Unity game engine (published on Google Play, itch.io, and Newgrounds)
- Refactored and improved the collaborator's original codebase post-launch to resolve bugs, provide quality-of-life features, respond to player concerns, and improve aesthetics

## Work Experience

#### Research Assistant, SMAC Lab

Oct 2021 - Feb 2022

OCAD University, Toronto, ON

- O Developed and maintained a multi-user, web-based virtual XR environment to showcase student digital media works using javascript and the A-Frame library
- Prepared easy-to-use documentation to provide non-programmers everything they need to quickly upload and establish virtual galleries for their works and design intentions