

## Professional Experience

### Maxis (EA)

June 2024 - Present

#### *Software Engineer*

- Built and maintained **C#/.NET** internal tools for *The Sims* franchise, streamlining asset workflows and cutting iteration time for content creators.
- **Collaborated with designers** and producers to implement gameplay systems supporting live-service requirements.
- **Authored technical documentation** and promoted **user-centric improvements** that reduced friction across disciplines.

### Circuit Stream

Feb. 2025 – Sept. 2025

#### *Game Design Bootcamp Instructor*

- Delivered lectures on **game design frameworks** (MDA, SSM, Situational Game Design) and guided students through iterative **prototyping in Unreal Engine**.
- Critiqued student projects through structured playtesting, helping them refine mechanics, systems, and user experience.
- Taught technical skills in Blueprints and documentation best practices to prepare students for **industry workflows**.

### The Immersive Archive

Sept 2023 – Dec 2024

#### *Technical Lead*

- Directed the technical roadmap for *The Immersive Archive*, a **Unity-based XR** preservation project showcased at **SIGGRAPH (2023)** and **AWE (2024)**.
- **Designed and implemented interactive modules** recreating landmark XR experiences for research and exhibition.
- Coordinated a cross-disciplinary team, ensuring timely delivery of features aligned with **archival and storytelling goals**.

### Maxis (EA)

Summer 2023 & 2024

#### *Software Engineer Intern*

- Developed internal **C#/.NET** tools to automate asset processing, reducing developer iteration cycles across multiple pipelines.  
**Partnered with engineers and designers** to integrate features that improved scalability for live projects.
- Produced documentation and tutorials to support adoption of new tools across the studio.

### LINDSAY Lab (University of Calgary)

Summer 2021 & 2022

#### *Student Researcher*

- **Designed and implemented** educational modules for **Lifebrush**, an XR multi-agent simulation plugin for **Unreal Engine** used in biology and medical research.
- Engineered Unreal Engine **C++ tools** integrating a Neo4j database API into runtime, enabling multi-scale digital twin simulations.
- Collaborated with researchers to align technical solutions with instructional and scientific goals.
- Presented work remotely at **Game Industry Conference (2021)**.

IstoInc.

Dec. 2019 – Jan. 2021

Lead Writer

- Wrote the **narrative, lore, and character dialogue** for *Atrio: The Dark Wild* (Steam release, Jan 2023). Maintained **narrative documentation** and collaborated with designers and programmers to **integrate story into Unity** gameplay systems.
- Oversaw the **iterative narrative design process**, ensuring consistency between worldbuilding, mechanics, and player experience.

### Selected Projects

Full portfolio: [mwahba.ca/portfolio](http://mwahba.ca/portfolio)

#### Egregore

- An **experimental adventure game** built in **Unreal Engine** which uses a novel **graph-based** puzzle mechanic to change the world around the player. Featuring a unique story taking place in a vibrant modern day Cairo.
- **Directed a team of 20+ students** in USC's Advanced Games Program to release *Egregore* on Steam in 2024.
- Showcased at the 2024 **Game Devs of Color Expo**.

#### Radio Exurbia

- A rock-and-roll, **trick-filled driving game** built in **Unreal Engine** where players explore alternate realities through a magical radio.
- **Implemented core gameplay systems and narrative triggers** that tied exploration to emergent radio broadcasts.

### Education

University of Southern California

2021 - 2024

MFA, Interactive Media | Thesis: *Egregore: De-mystifying the Adventure Game* ([paper](#), [game](#))

University of Calgary

2013 - 2021

BSc, Computer Science | Game Development Concentration, Embedded Certificate in Creative Writing  
BSc, Biological Science

### Awards and Honours

Sony Interactive Entertainment Pathways Scholar (2024)

Academy of Interactive Arts & Sciences D.I.C.E Scholar (2023)

Cannon-LaChappelle Award in Entrepreneurial Thinking (2021)

The Logic Magazine – “Leading Innovators: Top Prospects” (2021)