

Curriculum Vitae

Michael Wahba

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Education

University of Southern California - Master of Fine Arts, Interactive Media (2024)

- Thesis: [*Egregore: De-Mystifying the Adventure Game*](#)

University of Calgary - Bachelor of Science, Computer Science (2021)

- Concentration in Computer Game Development
- Embedded Certificate in Creative Writing

University of Calgary - Bachelor of Science, Biological Science (2017)

Scholarships, Awards and Honours

Academy of Interactive Arts and Sciences DICE Scholar (2024)

USC & Sony Interactive Entertainment Gerald Lawson Scholar (2024)

Game Devs of Color Expo Scholar (2024)

Richard Sohn Memorial Endowed Scholarship (2023)

Cannon-LaChappelle Award in Entrepreneurial Thinking (2020)

Alberta Innovates Summer Studentship (2019)

Professional Experience

Electronic Arts Maxis - Software Engineer (June 2024 - Present)

- Developing software tools used to create upcoming titles in *The Sims* franchise.

Electronic Arts Maxis - Software Engineer Intern (Summer 2022, Summer 2023)

IstoInc. - Lead Writer (Dec. 2019 - Jan. 2021)

- Wrote the story and character dialogue for [Atrio: The Dark Wild](#)
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Selected Personal Projects

Egregore

- MFA Thesis Project, directed a team of 30+ students.
- Selected to be included in USC's Advanced Games Program.
- First-person adventure game exploring the use of graph-based grammars as a game mechanic.
- Featured in the 2024 Game Devs of Color Expo

Radio Exurbia

- Adventure driving game featuring a novel world-switching mechanic.

Limina

- Short experiment playing with multiple forms of media in the context of a classic PC adventure game.
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Academic/Research Experience

The Immersive Archive - Mobile Environmental Media Lab (2022 - Present)

- Leading the technical development of [The Immersive Archive](#), an initiative to recreate and preserve the history of XR experiences. *The Immersive Archive* has been showcased at SIGGRAPH (2023) and AWE (2024).

Exploring the Use of Neural Graphics for Immersive Storytelling - Mobile Environmental Media Lab (2024)

- Research project funded by USC's Spark Grant to explore the uses of Neural Radiance fields and Gaussian Splats for immersive storytelling. Outcome was an interactive project, [The Virtual Garden](#), and a set of [tools and workflow](#) for creating immersive narratives with Gaussian Splats. Our work will be presented at DevFestYYC (2024).

Unreal Engine Graph Database Integration - LINDSAY Lab (2021)

- Research project conducted in the LINDSAY Lab at the University of Calgary developing an [Unreal Engine plugin](#) which connects a game instance to a Neo4j graph database for runtime queries. Results of this project were presented in a session at the 2021 Game Industry Conference.

Lifebrush -UCalgary, LINDSAY Lab (2020)

- Research project conducted in the LINDSAY Lab at the University of Calgary extending [Lifebrush](#), a VR tool for simulating multi-agent systems, and creating an interactive museum about COVID-19. Outcome was an undergraduate [research paper](#).

International Genetically Engineered Machines (iGEM) - University of Calgary (2019)

- Was a member of the [2019 University of Calgary iGEM team](#) where we researched a novel chlorophyll purifying process by modifying naturally occurring proteins. Our team had [great success](#) at the competition coming in second place overall in the undergraduate track. I was selected by the team to be one of the presenters in the competition's jamboree.

Research Assistant - Animal Physiology Lab (2016 - 2017)

- Conducted a year-long research project in Dr. Hamid Habibi's Physiology Lab investigating the effects of Sulfolane on the embryonic development of Zebrafish. I presented my work at the Biological Science Undergraduate Research Symposium where I won the award for "Best Presentation" in the Zoology track. Our work also resulted in a [publication](#).

Teaching Experience

Procedural Expression - USC (2023)

- Taught lectures on creative coding in Python as a student aide for the class *Procedural Expression* under the supervision of Prof. Mark Bolas at USC.

Augmented Reality Masterclass - USC (2022)

- Taught lectures on XR tools such as Effect House, Lens Studio and Lightship as a student aide for the class *Augmented Reality Masterclass* under the supervision of Prof. Scott Fisher at USC.

Seasonal Instructor - Prep101 (2018 - 2019)

- Taught students course material and strategies to excel on the Psychology/Sociology portion of the Medical College Admission Test.

Summer Science Camp Counselor - Webber Academy (2019)

- Taught elementary aged students concepts in Biology while leading fun, interactive activities.

Presentations, Events and Speaking Engagements

Gaussian Splatting for Immersive Storytelling, DevFestYYC (2024), Calgary, Alberta, Canada.

- Workshop presentation to be delivered at Google DevFestYYC in Nov. 2024.

Keynote Presentation, Webber Academy Career Symposium (2024), Calgary, Alberta, Canada.

- Invited to deliver the keynote presentation at *Webber Academy's* 2024 Career Symposium.

The Immersive Archive, AWE (2024), Long Beach, California, USA.

- Exhibit on the Expo floor showcasing *The Immersive Archive* project done in the Mobile Environmental Media Lab at USC.

The Immersive Archive, SIGGRAPH (2023), Los Angeles, California, USA.

- Exhibit in the Interactive Pavilion showcasing *The Immersive Archive* project done in the Mobile Environmental Media Lab at USC.

Hey! You Got Graph Data in My Behavior Tree!, Game Industry Conference (2021), Remote.

- Presentation at the 2021 Game Industry Conference held in Poznan, Poland. Delivered remotely.

International Genetically Engineered Machines (iGEM) Jamboree (2019), Boston, Massachusetts, USA.

- Selected as one of the presenters for the University of Calgary International Genetically Engineered Machines (iGEM) research team.
- Presented our research on creating a molecular based process for purifying canola oil at the competition.
- Our team won several awards including “Best Nutritional Project”, “Best Software” and “First Runner-Up” in the Undergraduate track.

Publications

Poetry

- Wahba, M. (2020). Prairie Fire. *YYC POP: Poetic Portraits of People*.

Published Research Articles

- Shah, S. Wahba, M. Yu, L. Achari, G. Habibi, H. (2019). Health Impact Assessment of Sulfolane on Embryonic Development of Zebrafish (*Danio rerio*). *Title of Periodical, volume number*(issue number), pages.
- Bressan, A. Wahba, M. Dixon, E. Ball, (2018). Completion Pancreatectomy in the Acute Management of Pancreatic Fistula after Pancreaticoduodenectomy: A Systematic Review and Qualitative Synthesis of the Literature.