Thomas Horne

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EDUCATION

Bachelor of Computer Science

September 2022-Present

Computer Game Development Stream

Carleton University, Ottawa, Ontario

- Third year standing, 11.64/12 (A+)
- Deans' Honour List, Faculty Scholarship
- Expected Graduation Date: April 2027

HIGHLIGHTED PROJECTS

Photochemistry March-June 2024

Personal commercial project. https://store.steampowered.com/app/2917850/Photochemistry/

100+ units sold - Self-published on Steam - Full-length Zachtronics-like factory puzzle game

- Utilized Steam's developer API to provide customized leaderboards
- Assembled a team of playtesters to guide the direction of development early on
- Released a full product according to the software development life cycle, including QA testing and continued maintenance

Vanishing Point February 2024

Development competition group project. https://ap1506.itch.io/vanishing-point

3D First-person puzzle game - 1st place in the CU 2024 February Game Jam

- Programmed a puzzle mechanic around various objects becoming intangible when outside of the players vision
- Created a full-screen post-processing shader to give the game a unique abstract style, making use of edge detection on the depth and normal buffers

WORK EXPERIENCE

Software Developer

May 2024 – Present

Royal Canadian Mounted Police, Ottawa, ON

- Performed full stack development to provide new internal tools, significantly cutting down on labour times
- Wrote automated unit tests and integration tests to drive development of new features
- Designed and maintained a survey app for Jira tickets, providing detailed prioritization information for hundreds of backlogged items

Teaching Assistant (Discrete Structures I & II)

January 2024 - March 2025

Carleton University, Ottawa, ON

- Taught various algorithms and time complexity fundamentals
- Demonstrated how to solve problems step-by-step through weekly tutorials

SKILLS

Unreal Engine - Godot - GLSL - C++ - C - Unity - Python - Java - Javascript - Vue