

Work Experience

Game Programmer (Unity) 🎮

Oakville, ON

RESEARCH | ARCHIPELAGO OF DESIGN

Oct 2024 – Current

- Collaborated with a **multidisciplinary team** on Inner Alliance, a DEI-focused educational strategy game for military organizations,
- Developed a procedural hex-based gameplay system using **voxelization, custom mesh generation, and shader techniques** to support varied environments.
- Architected core game systems using **MVP architecture and SOLID principles** to build maintainable, scalable systems.
- **Built in-editor tools** in C# to streamline content creation, empowering developers with **rapid iteration and efficient workflow processes**.
- Maintain **clear and concise documentation** of code architecture and workflow processes to support developers and designers.

Backend QA Systems Analyst

Toronto, ON

INTERNSHIP | PROOFPOINT

May 2020 – Aug 2021

- Contributed to the backend testing team for a large-scale mail security platform, **designing automated test solution for backend microservices** to boost team productivity and operating efficiency.
- Developed and maintained **custom python tools** to simulate production environments, **optimizing testing workflows and enhancing developer productivity**.
- **Spearheaded end-to-end testing** for a new platform migration project, owning **regression and performance testing**, and working closely with developers to perform **root cause analysis**.
- Built a **multi-threaded WPF tool** for bulk processing, replacing outdated systems, **accelerating testing pipelines by 300%**, and providing clear documentation for team adoption.

Projects

Ubisoft Next 2024 (Individual) 🎮

C++, OpenGL

3D, TURN BASED, STRATEGY GAME THAT PITS YOU 1V1 AGAINST ANOTHER PLAYER AMIDST A DYING STAR.

- Built a **custom 3D rendering engine** using OpenGL and a line-drawing API with projection, culling, and meshes
- Implemented advanced engine features including **vertex shading, collision detection, and a particle system**, enhancing visual quality and gameplay interactivity.

Dungeon Company (Technical Lead) 🎮

Steam, C#, Unity

A ROGUE-LIKE CARD BATTLER WITH THOUSANDS OF DOWNLOADS AND POSITIVE REVIEWS ON STEAM

- Authored **technical proposals, system diagrams, and architecture plans** focused on event-driven design and reducing coupling through clean, pattern-driven solutions
- **Managed a team of 4 programmers** across gameplay and UI, organizing sprint planning, assigning tasks via a Kanban board, and hosting weekly meetings
- Collaborated with design, art, and production leads to define scope, establish pipelines, and align on project goals

Education

Sheridan College

Oakville, ON

COLLEGE GRADUATE CERTIFICATE IN ADVANCED GAME PROGRAMMING

Sep 2023 – Jun 2024

Teaching Assistant for Computer Math I and tutor for Advanced Game Programming

University of Toronto Mississauga

Mississauga, ON

HONOURS BACHELOR OF SCIENCE IN COMPUTER SCIENCE

Sep 2017 – Jun 2022

Web Developer for the Digital Enterprise Management Association and the CCIT (Com. Tech) Department

Skills

Technical Skills: Dated Oriented Design, Graphics Pipelines, Vectors & Matrices, SQL Databases

Programming: C++ (1 year), C# (3 years), Python (3 years), JavaScript (3 years)

Software: Unity (2 years), Visual Studio (3 years), Git (5 years), Jira (1 year)

Soft Skills: Effective Communication, Patience, Problem-Solving, Empathy, Adaptability

Awards

Mar 2024 **Ubisoft NEXT Finalist**, Independent C++ **game built within 72 hours**, recognized for advanced 3D graphics rendering and innovative gameplay.

Ubisoft

Aug 2024 **Gaming Garage 2nd Best Game & 2nd Best UI**, For excellence in user interface design and engaging game mechanics.

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