

# Marissa R. Rowles-Stewart

Game Developer

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## Education

**Advanced Diploma with Honours in Game Development Programming,**  
4.23 GPA

Red River College Polytechnic, Winnipeg, Manitoba, April 2024

- Collaborated alongside a team of artists and programmers to create a versatile collection of video games in Unreal Engine 5.
- Lead the development of User-Interface systems over multiple projects, notably creating a custom system to allow for game controllers to interact with the user-interface.
- Produced user-interface based dialogue machine with opportunities for choices and visual novel style sprites.
- Analyzed user needs over the course of multiple playtests and implemented design software solutions to meet them.
- Developed Virtual Reality experiences, building a custom gesture system using the position of the headset compared to the controllers.

## High School Diploma

Collège Sturgeon Heights Collegiate, Winnipeg, Manitoba, June 2022

- Succeeded in recreating the classic minesweeper game using techniques like object-oriented programming.
- Coded a functional recipe book application with pre-coded recipes and user implemented recipes.
- Created and directed student films for a media production course.

## Technology Education Diploma Specializing in Graphic Arts

Collège Sturgeon Heights Collegiate, Winnipeg, Manitoba, June 2022

- Created mock-up designs for both assignments and simulated clients, notably designing posters advertising Collège Sturgeon Heights Collegiate's trade courses.
- Designed magazines and posters for simulated events, such as concerts.

## Work Experience

### Co-Op Programmer

Complex Games Inc. Winnipeg, Manitoba, April 2023 – July 2023

- Participated in an agile based work environment utilizing scrum, user stories and kanban to complete portions of the product.
- Succeeded in creating a Unity3D based first person shooter, including pickups and ai based enemies.
- Integrated queue-based object pooling into frequently used assets, resulting in a 60% performance increase.
- Implemented common optimization techniques such as caching and batching, resulting in a 25% performance increase.
- Utilized ECS principals allowing for multiple layers of health to be added and removed from players smoothly, caching the components into a separate manager that reads off the highest priority health component.

### Volunteer

Comic-Con, Winnipeg, Manitoba, April 2019

- Monitored the entry way to make sure that attendees had paid for badges.
- Assisted in crowd control

## Honors and Awards

- Skilled Trades & Technology Award of Achievement 2020
- Awarded Moe Kowalson Optimist Club of Assiniboia Volunteer Scholarship Award, 2020 & 2021
- Honour Roll Student from 2016-2024

## Skills

I am fluent in:

- C++ (2 Years)
- C# (1 Year)
- Java (3 years)

I have experience using:

- Unreal Engine 5 (2 Years)
- Unity3D (1 Year)
- Perforce (2 Years)
- Git (3 Years)
- Trello (2 Years)
- Figma (1 Year)

I understand and can work in these business and coding principles:

- Agile Frameworks
- MVC (Model View Controller)
- ECS (Entity Component System)
- SOLID principal

I am skilled in:

- User interface development and layout
- Performance analysis
- Critical thinking
- Creativity in design
- Project planning
- Adaptability and ability to learn new technologies

## Languages

English – Native

## Personal Interests:

**Cinematography:** Created a collection of student films during grade school.

**Digital Media Design:** Experimenting with all forms of digital media to find new interests and techniques.

**Video Games:** Use video games to fuel my inspiration with genres like virtual reality, roleplaying, and sandbox.

## References

### Kyle Geske

Instructor, Game Development - Programming

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### Lawrence Wachs

Teacher, Computer Science

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### Derek Baert

Classmate

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