## Nathan McAndrew

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#### Objective

Seeking an entry-level software engineering position utilizing strong programming skills in C++, C#, or JavaScript. Available December 2025.

## Experience

## Software Intern | C++, Unreal Engine, Jenkins

May '25 - Aug '25

**Doron Precision Systems** 

- Spearheaded the integration of autonomous vehicle systems, facilitating realistic road scenario simulations through advanced collision detection and prevention methodologies.
- Decreased CI/CD build tooling from 1 hour to less than 5 minutes through a C++ program.
- Utilized knowledge of UE to reduce the codebase's warnings from over 1,500 to 0.

## **Game Developer/Programmer | C++, Unreal Engine**

May '24 - Aug '24

Changeling VR

- Led an initiative that resulted in reducing the project's overall size by more than 30%.
- Delivered significant improvements to algorithm efficiency, achieving a 50% reduction in processing time.
- Accelerated the design and integration of gameplay features by facilitating inter-team collaboration, resulting in faster implementation timelines.

#### Education

## **Game Design and Development (BS)**

Sep '22 - Dec '25

Rochester Institute of Technology

GPA: 3.69

Relevant Courses: Game Graphics Programming II (C++, DirectX 12), Data Structures and Algorithms II (C++, Open GL), Multimedia Development (Flutter), Engineering of Subsystems (React, Java)

#### Skills

- Programming Languages: C++, C#, JavaScript, Python, Dart, Java, HTML, CSS
- Engines and Frameworks: Unreal Engine, Unity, DirectX 11/12, OpenGL, Flutter, Angular, React

#### **Projects**

## Rendering Engine - DirectX 11, C++ - Academic/Personal Project

- Orchestrated advanced rendering techniques, including parallax and environment mapping, enhancing visual quality.
- Improved realism of lighting through implementation of Physically Based Rendering.
- Implemented comprehensive 3D transformations, enabling precise object manipulation.

## Bathroom Break - Unity, C# - Personal Project

- Competed with 3 peers in the Brackey's Game Jam, leveraging C# programming skills to absorb new knowledge and techniques in a fast-paced environment.
- Streamlined task management with Jira, boosting team productivity by prioritizing essential gameplay elements.

# Crowdfunding Application - TypeScript, Angular, HTML, CSS -

#### **Academic Project**

- Built a back-end environment using a RESTful API that was cohesive with other tiers of the MVVM design.
- Undertook a project management role in a team of five and utilized Scrum methodologies to boost efficiency.
- Applied knowledge of web technologies and Angular to create a simple and effective front-end.

#### Extracurricular Experience

Organization: RIT Graphics Programming Club

- Presented and discussed advanced graphics programming techniques.
- Network with graphics programmers and discuss current projects.