# Education

**Bachelor of Science in Game Design and Development** Expected 2018 Rochester Institute of Technology Rochester, NY

Presidential Scholarship

Dean’s List

# Skills

**Programming Languages:** C++, C#, Java, HTML, CSS, JavaScript **VCS:** Git

**Graphics APIs:** Direct3D 11 (with HLSL), OpenGL (with GLSL) **IDE:** Microsoft Visual Studio

**Game Engines:** Unity, Unreal

# Projects

**Ori Engine**

is my dive into graphics and game engine programming.

using Visual Studio, Direct3D 11, C++, and HLSL. Main features include the following:

* Deferred Shading with normal buffer encoding and position reconstruction
* Physically Based Rendering, Soft Shadowing, and Screen Space Ambient Occlusion
* Cascaded Shadow Mapping and Particle System
* Post-Processing: Bloom, Eye Adaptive Exposure, Tone Mapping for High Dynamic Range

**The Adventures of Rob & Ots**

is a 2.5D online cooperative puzzle-platformer.

* Made in a team of four as network and gameplay programmer.
* Programmed a visual communication system, character selection, and user interface.
* Used Unity, Visual Studio, and C#.
* Played by two, using their robot’s unique abilities to work together to solve puzzles.

**PolyRunner**

is a procedural endless runner game for VR with an Oculus Rift.

* Made in a team of four as gameplay programmer.
* Programmed player controls and procedural generation of obstacles.
* Used Unity, Visual Studio, C#, and Oculus SDK.
* Players control a damaged alien spaceship escaping across the desert near Area 51.

**Dolphin Flip**

is a launcher game for android devices.

* Made in a team of four as gameplay programmer.
* Programmed player controls, interactables, and obstacles.
* Used Unity, Visual Studio, and C#.
* Played as a dolphin with dreams of the stars and rocket fuel to spare.

# Relevant Coursework

Foundations of Game Graphics Programming AI for Game Environments

Data Structures and Algorithms for Games and Simulations Online Virtual Worlds and Simulations

College Physics, Analytical Geometry, Discrete Math 2D and 3D Animation and Asset Production