

# Nicolas San Jose

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## Objective

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To obtain a cooperative education or internship position with a focus in programming. Available immediately.

## Education

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### Bachelor of Science in Game Design and Development

Rochester Institute of Technology  
Presidential Scholarship, Dean's List

December 2018  
Rochester, NY

## Experience

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### GeoGame Design and Developer

Rochester Institute of Technology

May 2018 - August 2018  
Rochester, NY

- Developed with CityEngine, Unity, Visual Studio, and C#.
- Conducted research between Mapbox and CityEngine for integrating real world geospatial data into construction of the setting, Dickinson, Texas in the aftermath of Hurricane Harvey.
- Modified Unity's third person character controller to enable backwards movement, and implemented the camera transition between third person and first person map view.
- Programmed user interface for the map view and marker system.
- Programmed the goal manager for timed navigation objectives, with increasing difficulty of verbal instruction.
- Arranged objectives in the levels to follow the script, based on information from real events.
- Worked in an interdisciplinary team consisting of eight National Science Foundation (NSF) Research Experience for Undergraduate (REU) students and four GeoGame Design and Developers.

## Skills

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**Programming Languages:** C#, C++, HTML, CSS, JavaScript

**Graphics APIs:** Direct3D 11 (with HLSL), OpenGL (with GLSL)

**Game Engines:** Unity 5, Unreal Engine 4

**VCS:** Git

**IDE:** Microsoft Visual Studio

**Other Tools:** Esri CityEngine

## Projects

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### Ori Engine

November 2017 - February 2018

is a rendering engine and shader testing ground

- Created using Visual Studio, C++, Direct3D 11, and HLSL.
- Wrote shaders for deferred shading with normal buffer encoding and position reconstruction, physically based rendering, screen space ambient occlusion, a particle system, cascaded shadow mapping, soft shadowing, and post-processing: bloom, eye adaptive exposure, and tone mapping for high dynamic range.

### PolyRunner

March 2016 - May 2016

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

- Created using Unity, Visual Studio, C#, and Oculus SDK, in a team of four.
- Programmed player controls, ship shields, ship fuel drain and pickup, and tiling sand layers.

### The Adventures of Rob & Ots

October 2015 - December 2015

is a 2.5D online cooperative puzzle-platformer

- Created using Unity, Visual Studio, and C#, in a team of four.
- Programmed detached camera controls, ping communications, sprint effect, and character selection.