# Chi Cheng (Jerry) Hsu

Purdue University, Sophomore standing, 4.0 GPA

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### Skills

Programming in C, C#, Java, and Javascript

- Unity Engine development for Windows and Android
- Computer graphics and special effects programming in HLSL
- Multimedia production with Photoshop, After Effects, Cinema 4D, and Premier Pro
- Web development (chichenghsu.com)
- Computer modeling and ray-trace rendering
- Experience with UX design

## **Projects and Experience**

#### Radiant

 Radiant is a hack and slash built with Unity Engine in C# for Windows in a project that spanned 5 weeks and 3 team members - an artist, a designer, and me, the programmer. The game required teamwork, dedication, and went on to win the National STEM Video Game Open-platform Award.

#### CRTS

 CRTS is an ongoing real-time strategy game built by myself as a personal project in Unity. A procedural terrain is generated and stitched into a smooth playable world complete with separate biomes, sub biomes, and batched mesh props.
With the thousands of concurrent visible objects, this project leveraging the GPU with specialized rendering pipelines and custom shaders for optimal performance.

#### JPhysics

 My own personal fully featured 2D physics engine programmed from the ground up in Java.

#### Traffic Sim

 Built on top of my physics engine, this project seeks to give more insight into road design with a real-time simulation of traffic running inside a 2D world. Each car is simulated down to the friction on the individual tires. In control are Al's that range from those that make mistakes to those that road-rage.

#### Adobe CC and Cinema 4D

 With years of experience using Photoshop, Premier Pro, and After Effects, I am capable of making trailers, renders, and assets. See my website for some sample projects.