

# Klaudius Diliunas

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## **Education**

### **DePaul University**

1 E. Jackson Blvd.  
Chicago, IL 60604  
312-362-8000

2019-2024

Combined Degree Program

BS Computer Science w/ Game Systems Concentration  
September 2019—November 2022

MS Software Engineering w/ Real-Time Game Systems Concentration  
November 2022—June 2024

## **Work Experience**

### **3D Hologroup, Inc.**

250 NE 51st St.  
Fort Lauderdale, FL 33334

*Augmented Reality Developer Internship*

2022 September - November  
3 months

- \* Contributed to the development of AR applications for users with speech and mobility disabilities to enable more rapid communication.
- \* Use of industry standard tools such as *Unity* and database technologies based on REST APIs.

### **NetherRealm Studios**

2650a W Bradley Pl.  
Chicago, IL 60618

*Jr. Associate Software Engineer (Temp.)*

2023 June - Current

- \* Contributed to the development of core game engine features including debugging tools and rendering in Unreal Engine.
- \* Utilized contemporary tools and applications to help debug and profile in the game development process.
- \* Collaborated with outsourcers on game features as well as participated in code reviews to ensure quality and longevity.

## **Skills**

### **Programming Languages:**

- \* Proficient in C/C++ and other languages including C#, Java, and some JavaScript

### **Unreal Engine Development:**

- \* Developing and maintaining core engine plugins.
- \* Modifying the engine for special use cases.
- \* Writing Slate windows/applications for core game systems and aid debugging.
- \* Rendering development including writing and expanding shaders in HLSL for custom effects.

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## **Game Engine Development:**

- \* Using object-oriented design patterns to develop systems for game development.
- \* Design patterns include object factory/pool, commands pattern, singleton, finite state machines, attorney-client idiom, and double-dispatch/visitor pattern.
- \* Knowledge of linear algebra-based mathematics for related computation such as transform matrices.
- \* Integration of a physics library for dynamic objects in a scene.
- \* Experience with using entity-component-system-based libraries.

## **Graphics Programming:**

- \* Experience in DirectX, OpenGL, and Vulkan
- \* Phong lighting
- \* Normal mapping
- \* Real-time shadow mapping
- \* Skeletal Animation

## **Development with Unity:**

- \* Augmented Reality applications and C# scripting.

## **Miscellaneous Development:**

- \* Basic webserver development using NodeJS and ExpressJS technologies
- \* Writing distributed systems such as simple blockchains
- \* Studied artificial intelligence techniques such as search algorithms and machine learning