# NICOLAS NEBEL

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#### **EXPERIENCE**

## **Epic Games**

Summer 2020

Unreal Engine Programmer Intern

 Working with the sequencer team again, driving development of a new sequence and animation related editor feature for UE5

# UCSD Immersive Visualization Lab <u>git.io/JfzE7</u> | Winter 2020 Software Developer

- Developed a cinematic volumetric renderer for medical scans
- GPU-optimized, supports transfer functions and volumetric, diffuse, and clearcoat materials; see more details and some renders in my presentation here: <a href="mailto:git.io/JJYSK">git.io/JJYSK</a>

# Epic Games

Summer 2019

Unreal Engine Programmer Intern

- Worked with the sequencer team and related artists on UE4's cinematics tools
- I renovated the curve editor's toolset, added new spline generation tools, and improved attachment controls to make handling animated attachments less frustrating
- Some of my work was shown in the context of virtual productions (like Fortnite events) in a stream with a senior cinematics artist at Epic: <a href="mailto:youtu.be/j5OYgBputvs">youtu.be/j5OYgBputvs</a>
  - On the curve editor tools: "This is awesome for camera work if you're trying to fine tune the camera, especially if you get into shakes, like camera shakes"
  - On spline generation: "It's awesome ... you can basically do a series of very complex [spline] curves and stuff, very quickly"

### **EDUCATION**

# UC San Diego

Class of 2022

- Computer Science (B.S.), GPA: 3.65, Member of IEEE and ACM
- Took CSE 167: Computer Graphics I & CSE 168: Computer Graphics II

### **PROJECTS**

## CSE 168 Final Project

git.io/JJY9G

 Implemented Disney Animation Studio's "Practical and Controllable" hair model using Intel Embree's ray tracing framework

## Vive Filmmaker (SDHacks)

git.io/fxoVy

• Led team to make a VR tool using Unity to help filmmakers film VFX/3D animations in a virtual scene with a virtual camera

#### **SKILLS**

Languages: C++, Java, Python, JavaScript, C#

Technologies: Unreal Engine, Unity3D, OpenGL, Vukan, Embree, OpenCV