Ben Gillott

in linkedin.com/in/ben-gillott · 🌐 ben-gillott.com · ✉ benjaminrgillott@gmail.com · 🏠 Seattle, WA

EDUCATION

Cornell University — 05/2021
Bachelor's, Computer Science — GPA: 3.1

EXPERIENCE

Whiteout Solutions Software Engineer — 10/2021 - 10/2023

- Enabled a massive mapping of endangered habitats by developing Computer Vision tools leveraging drone sensor fusion in Java and C++.
- Achieved a consistent 60+ FPS on billions of LIDAR points in Virtual Reality simulations using Unity and C#.
- Pioneered a custom file system in Java that saved TBs of space and facilitated continuous deployment and accelerated testing.
- Improved cargo ship fuel efficiency by optimizing ML feature recognition accuracy and speed in C++.
- Enabled end-users to calculate of biomass volumes by creating a user-friendly WebApp with React and WebGL.

Kitware Computer Graphics R&D Intern — 05/2021 - 08/2021

- Automatically interpreted complex classified documents using Computer Vision algorithms and an LLM in C++.

Cornell University Computer Graphics Research Assistant — 06/2019 - 12/2020

- Ported a research graphics language into the Unity engine to completely eliminate space transformation errors.
- Contributed to a SIGGRAPH publication by writing shaders with subtle graphics errors in GLSL.
- Built a game engine and render pipeline from scratch in C to test the research graphics language.

Capital One Software Engineering Intern — 05/2020 - 08/2020

- Prototyped a Virtual Reality visualization of a bank interface with an incorporated AI model for signature recognition using Unity and C#.

PROJECTS

Cloudlight Games Independent Game Developer — 07/2019 - Present

- Ship 9 games using Unity, Unreal, and Godot, with over 1000 plays on Itch.io.
- Implement real-time rendering techniques using Vulkan and WebGL.

Terrain World Graphics Engine Team — 05/2021

- Constructed a graphics pipeline and world generator in C and OpenGL with LOD meshing and frustum culling to achieve 60+ FPS at scale.
- Implemented a photorealistic water simulation with shaders for flare and bloom using C and HLSL.

Panic Painter Mobile Game Development Team — 04/2021

- Wrote engine code in C# for a 2D mobile game and supported artists with shaders to win first place in visuals.

SKILLS

Topics: Computer Graphics, Computer Vision, VR, Linear Algebra, Game Development

Programming: C#, C++, Java, Python, HLSL, OpenGL, Vulkan, React, HTML, TS

Tools: Git, Docker, Unreal, Unity, Godot

Languages: English, Japanese, Spanish

ADDITIONAL

Mountaineering Instructor
05/2022 - Present
Teach students glacier climbing and lead climbing expeditions.

Honors Java TA
08/2018 - 02/2019
Taught a 40-student lab and tutored students weekly.