

Ben Gillott

 [linkedin.com/in/ben-gillott](https://www.linkedin.com/in/ben-gillott)  benjaminrgillott@gmail.com  802.424.6555  Seattle, WA

EXPERIENCE

Whiteout Solutions Software Engineer 10/2021 - 10/2023

- Developed Computer Vision tools in Java and C++ leveraging sensor fusion to enable a large scale mapping of endangered habitats.
- Prototyped Virtual Reality visualizations of LIDAR scans in Unity and Unreal using an Octree to achieve a high frame rate on billions of points in C#.
- Pioneered a cross-platform file system in Java to save TBs of server storage space and accelerate user testing with continuous deployment.
- Optimized ML feature recognition and processing speed in C++ to improve cargo ship fuel efficiency.
- Created a user-friendly website with React and WebGL to enable user calculation of biomass volumes.

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

- Incorporated Computer Vision algorithms and an LLM in C++ to automatically interpret classified documents.

Cornell CAPRA Research Assistant 06/2019 - 12/2020

- Modded a cutting edge language into the Unity game engine to eliminate transformation errors.
- Devised GLSL shaders with subtle graphics errors for a SIGGRAPH paper.
- Built a game engine and render pipeline in C to test a research graphics language.

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

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

PROJECTS

Cloudlight Games Independent Game Developer 07/2019 - Present

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

Interactive Water Graphics Engine Team 05/2021

- Built a graphics engine with water, flare, and bloom shaders in 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.

Plan Bee Art Center Game Jam 08/2020

- Developed code in C# and aided art content pipeline to win silver for visuals.

Terrain World Graphics Engine Team 12/2019

- Constructed a graphics pipeline and world generator in C and OpenGL with LOD meshing and frustum culling to achieve 60+ FPS at scale.

EDUCATION

Cornell University

B.A. Computer Science
05/2021

GPA: 3.1

Skills

Computer Graphics
Computer Vision
Full-Stack Development
Linear Algebra
Game Development
VR Development

Programming

HLSL • OpenGL • Vulkan
Java • C# • C++ • Python
React • HTML • TS

Tools

Git • Docker
Unreal • Unity • Godot

Languages

English • Japanese • Spanish

ADDITIONAL

Mountaineering Instructor

05/2022 - Present

Volunteer to teach glacier climbing and lead student expeditions.

Artist

01/2016 - Present

Create digital and linocut posters.

Honors Java TA

08/2018 - 02/2019

Led a 40-student lab and held office hours weekly.