Caleb Biasco RENDERING ENGINEER

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Relevant Experience

Crytek · Frankfurt, Germany
Rendering Engineer   Spring 2024

Apple · Sunnyvale, CA
AR/VR Graphics Engineer IV   Fall 2022 – Winter 2023
AR/VR Graphics Engineer III   Summer 2019 – Fall 2022

- Owned transparency rendering on visionOS and architected over half a dozen transparency-based features
- Maintained and improved low-level Metal backend along with frame graph renderer frontend
- Implemented novel, specialized graphics algorithms for visionOS as well as features that have shipped in the RealityKit framework, such as the soft grounding shadow treatment and manual draw call sorting API
- Estimated feature scope and coordinates small teams (up to 5 people) for large-scale projects

Facebook Reality Labs · Pittsburgh, PA
Software Engineer I   Spring 2019

- Supported the virtual avatar research with bespoke systems programming

BioWare · Austin, TX
Tech Art Intern   Summer 2018

- Designed and implemented a large tech art project directed at live support of the game Anthem, involving automation in Frostbite among many systems and considerable UX design to support several potential workflows

Skills

Programming Languages (Adept)
C · C++ · Zig

Programming Languages (Intermediate)
Swift · Obj-C · C# · Python · Assembly/ARM

Game Engines and Graphics APIs
Frostbite · Unity · Metal · Vulkan

Source Control
GitHub · Perforce

Notable Experience
Proprietary game engines · TBDR chip architecture · AR/VR · Performance analysis
Scene-level render algorithms · Project leadership

Academic Projects

Isetta Engine · Entertainment Technology Center   Fall 2018

- Architected and developed a game engine over a semester in a team of 4 programmers and a producer
- Documented the engine development process to share online for similarly ambitious programmers

Music in Motion · Entertainment Technology Center   Spring 2018

- Prototyped advanced graphics and new VR interactions to use in our experience using the Vive and Leap Motion

Education

Master's of Entertainment Technology · GPA: 3.88   Spring 2019
Carnegie Mellon University, Entertainment Technology Center · Pittsburgh, PA

Bachelor's of Science, Computer Science · GPA: 3.88   Spring 2017
University of Minnesota, Twin Cities · Minneapolis, MN