Benjamin Bartschi

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EDUCATION

Massachusetts Institute of Technology

Cambridge, MA

B.S. Computer Science (GPA 4.7/5.0), Concentration in Film/Games/Interactive Media

June 2023

• Relevant coursework: Computer Graphics, Software Construction, Algorithms, Web Programming, Discrete Math, Linear Algebra, Video Game Studio, Video Media

EXPERIENCE

Software Engineer

September 2021 – Present

BeyondCAD

Remote

- Engineered user-facing tools in visualization engines (BeyondCAD and BeyondTypicals) with C++ and UE4 that are currently being used by firms in the US.
- Implemented Unreal's Movie Render Queue into our run-time software, allowing teams to quickly produce high-fidelity imagery and videos to secure competitive project bids.
- Designed and documented a UI system to standardize development across a team of 6 engineers and designers, while also providing users with a consistent design language and increased accessibility.

Software Engineer Intern

April 2021 – August 2021

BeyondCAD

Remote

• Lead C++ and UE4 development on "Vision Studio," a set of features allowing engineering firms to visualize photo-realistic, real-time infrastructure projects, including a media sequencer, GANTT chart builder, and touchscreen presentation mode.

Unity Game Development Intern

January 2021 – March 2021

Hiddenswitch

Remote

• Optimized rendering performance for mobile by implementing light mapping workflows and LOD scripts.

Projects

Chi Studio $\mid C++\mid$ breakdown link

Winter 2021 - 2022

• Built a minimal 3D package with modern DCC functionalities, such as 3D modeling, path tracing, compositing, and animating.

benbartschi.me | Blender, React, three.js | site link

January 2022

 Modeled, baked, and coded a real-time interactive desk scene. Designed and developed the site UI and front-end systems.

TreeDocs | React | breakdown link

Summer 2021

• Designed and developed a node-based code planner and documentation system to streamline dev-team communication at work.

TECHNICAL SKILLS AND INTERESTS

Languages: C/C++, Python, JavaScript, C#, Java, HTML/CSS, MATLAB

Software: Blender, UE4, Unity, AfterEffects

Hobbies: Photography, videography, a cappella singing, weight-lifting, knitting, 3D printing