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

Technical Director (PUP) Intern

June 2022 – August 2022

Pixar Animation Studios

Emeryville, CA

- Learned and implemented Pixar's proprietary pipeline in a small group short film of 10 people.
- Extended Presto, the in-house animation software, with mechanical rigging functionality for gear relationships.

Software Engineer

September 2021 – May 2022

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.

PROJECTS

Commons | React, socket.io | site link

January 2023

- A collaborative canvas for designing 3D experiences. Perfect for blocking out video game levels in real-time, or communicating ideas for an animation set.
- Won 1st place in MIT's web programming competition.

Chi Studio | C++ | 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.

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