

Ethan Buttimer

COMPUTER SCIENCE · COMPUTER GRAPHICS ENGINEERING · 3D ANIMATION PRODUCTION

☎ (847) 609-0701 | ✉ ethan.buttimer@gmail.com | 🏠 ethanbuttimer.github.io | 📺 ethanbuttimer

Education

University of California, Berkeley

Fall 2018 - Spring 2022

PURSuing B.A. IN COMPUTER SCIENCE AND CERTIFICATE IN DESIGN INNOVATION. GPA: 3.97

Coursework: Computer Graphics (C++, OpenGL), 3D Modeling and Animation (Maya 2020, Houdini, Python), Artificial Intelligence and ML, Functional Programming (Python, SQL), Data Structures (Java), Discrete Math and Probability Theory, Linear Algebra and Differential Equations, Multivariate Calculus, Design Methodology, Virtual Reality (C#), Film History, Computer Architecture (C, RISC-V), Sound Computing (Max 8)

Activities: 3D Modeling and Animation at Berkeley (3DMA), Pianist in Chamber Music Ensemble, Cal Hiking and Outdoor Society (CHAOS)

Honors: Upsilon Pi Epsilon CS Honor Society, Sigma Phi Epsilon Balanced Man Scholarship Winner, National Merit Scholarship Winner

The Animation Collaborative

Fall 2019

INSTRUCTOR MICHAL MAKAREWICZ OF PIXAR ANIMATION STUDIOS

Coursework: Fundamentals of Animation

Experience

UCBUGG 3D Modeling and Animation

Jan 2020 - Present

HEAD COURSE FACILITATOR AND 3DMA CLUB TREASURER

- Delivered lectures and developed lab assignments related to the 3D animated film pipeline
- Provided guidance and technical support to student production teams
- Organized and promoted campus events to engage with the computer graphics industry
- Led course staff meetings and managed club finances

Geopogo AR

Aug 2020 - Present

SOFTWARE ENGINEERING INTERN

- Designed user interfaces for a Unity-based architectural modeling product
- Developed editor tools including an interactive procedural wall generator

Coding4Youth Inc.

Jun 2019 - Present

COURSE CONTENT DEVELOPER AND ONLINE PROGRAMMING INSTRUCTOR

- Created projects, quizzes, and lecture slides for courses on Python, HTML/CSS/JS, Scratch, Roblox Studio, and Lua
- Taught interactive courses on creative programming and game development to over a hundred students

Digital Porpoise LLC

Summer 2017, 2018

WEB DEVELOPMENT INTERN

- Revised marketing content and created a help system for the company website
- Configured and tested a software product using an agile bug-tracking tool (Pivotal Tracker)
- Managed email campaigns (Mailchimp), CRM (Insightly), and social media posts

Projects

Mirage (3D Animated Short Film)

Sep 2020 - Jun 2021

TECHNOLOGY AND SIMULATION LEAD, CNM190 ADVANCED DIGITAL ANIMATION PRODUCTION TEAM

- Programmed custom tools to improve texturing and effects workflows (Python and MEL)
- Created procedural particle simulations for the main disintegration effect (Houdini)
- Shaded, rigged, and animated character models (Maya, Substance Painter, RenderMan)
- Designed and modeled 3D assets (Maya)

Path-Traced Blackbody Glow Simulation

Spring 2020

SOFTWARE DEVELOPMENT TEAM MEMBER, COMPUTER GRAPHICS AND IMAGING (CS184) FINAL PROJECT

- Programmed emission and reflection calculations based on material attributes, temperature distributions, and physical laws
- Implemented core path-tracing algorithms (C++) and a custom COLLADA file format
- Conducted performance testing and implemented color spectrum caching