

COMPUTER SCIENCE · COMPUTER GRAPHICS ENGINEERING · 3D ANIMATION PRODUCTION

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## Education

#### University of California, Berkeley

Fall 2018 - Spring 2022

#### PURSUING B.A. IN COMPUTER SCIENCE AND CERTIFICATE IN DESIGN INNOVATION. GPA: 3.96

**Coursework**: Computer Graphics (C++, OpenGL), 3D Modeling and Animation (Autodesk Maya, Houdini, Python, MEL), Intro Functional Programming (Python, SQL), Data Structures (Java), Discrete Math and Probability Theory, Design Methodology, Linear Algebra and Differential Equations, Multivariable Calculus, Circuits and Intro ML, Virtual Reality (C#), Film History, Computer Architecture (C, RISC-V)

**Activites**: Pianist in Chamber Music Ensemble, Cal Hiking and Outdoor Society (CHAOS), Intramural Soccer, Upsilon Pi Epsilon CS Honor Society **Honors**: 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**

### **3D Modeling and Animation at Berkeley**

Jan 2020 - Present

#### **UCBUGG COURSE FACILITATOR AND 3DMA TREASURER**

- · Delivered lectures and prepared 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
- Managed club finances and participated in leadership team meetings

Geopogo Aug 2020 - Present

## COMPUTER GRAPHICS AND SOFTWARE ENGINEERING INTERN

• Developed user interfaces for a Unity-based architectural modeling product with AR visualization support

Coding4Youth Inc.

Jun 2019 - Sep 2020

## COURSE CONTENT DEVELOPER AND ONLINE PROGRAMMING INSTRUCTOR

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

Digital Porpoise LLC Summer 2017, 2018

### WEB DEVELOPMENT INTERN

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

# **Projects**

# **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 in C++, custom COLLADA file format
- Conducted performance testing and implemented color spectrum caching

## **Special Order (UCBUGG 3D Animated Short Film)**

Fall 2019

#### PROJECT MANAGER, PRODUCTION TEAM MEMBER

- Designed, modeled, and shaded 3D characters and assets (Maya, Mudbox, Substance Painter, Photoshop)
- Rigged and animated characters, vehicles, and cameras
- · Lit, rendered, and composited shots (After Effects)