

Brandon Hua

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Education

University of California, Los Angeles

M.S. Computer Science

GPA: 4.0

Expected Dec 2022

University of California, Los Angeles

B.S. Computer Science

GPA: 3.75

Sep 2015 - Aug 2019

Skills

Programming: C++, C#, Python, Javascript, HTML, CSS

Other: Git, Perforce, React, Node.js, MongoDB, OpenGL, Unity

Experience

Software Engineering Intern at Dolby

- Wrote profilers using OpenGL to measure GPU costs of HDR image blending
- Prototyped and tested an algorithm used to reduce CPU usage during the display of Dolby Vision encoded videos

Sep 2019 - Jun 2020

C++, OpenGL, Python

Game Development Intern at Scientific Games

- Developed a "progressive scroll" feature to advertise potential jackpot winnings to slot machine players
- Implemented "backdoor jackpots" into a slot machine game to keep long-term payouts between legal bounds

Jul 2021 - Present

Unity, C#

Projects

Domino Simulator

A domino structure building sandbox game for PC.

- Implemented player-drawn Bézier curves as a streamlined method for placing dominoes
- Serialized game state for easy storage and retrieval of player data
- Participated in group discussions, involving design patterns and UML diagrams, to design overarching code structure

Sep 2018 - Dec 2018

Unity, C#

Blogging Server

A MEAN stack blogging website.

- Implemented REST API calls used to save, retrieve, and update blog posts
- Used Angular to develop dynamic UI to help users write, update, and publish blogs
- Employed JSON Web Tokens to establish secure, authenticated sessions with users

Sep 2018 - Dec 2018

MEAN, JavaScript

IMDB Clone Website

A movie database website modeled after IMDB.

- Used the Bootstrap front-end framework to create user-friendly, responsive web pages
- Sanitized user inputs and added integrity constraints to prevent database corruption

Apr 2018

PHP, Bootstrap, SQL

Activities

UCLA Association for Computing Machinery

- Completed year-long group-based game development projects, honing skills in game design and programming

Sep 2017 - Jun 2019