

Brandon Hua

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EXPERIENCE

Software Engineer @ Meta

Tech: iOS, Objective-C, C

Apr 2022 – Jan 2023 | Menlo Park, CA

- Built out badge notifications within Messenger video calls to attract user attention to new/underused features
- Wrote UI components programmatically using an internal UIKit-based library to implement provided Figma designs
- Integrated Messenger avatar video calling features with an internal Objective-C logging library to collect comprehensive usage metrics
- Set up proprietary database (Scuba) tables to store new logs, integrated with Apache Hive for use by the analytics team
- Developed an extension for Meta's C-based video calling library (rsys) that enables dual view of the camera and avatar to aid the technical artist workflow
- Served the avatar team's on-call rotation, fixing and triaging user-reported bugs related to avatar video calling across Messenger and Instagram

Unity Development Intern @ Light & Wonder

Tech: Unity, C#

Jul 2021 – Mar 2022 | Remote

- Developed a render texture scroll effect as an animated UI feature, used to advertise potential jackpot winnings to slot machine players within limited screen space
- Implemented "backdoor jackpots" into a slot machine game to keep expected long-term payouts between legal bounds

Software Engineering Intern @ Dolby

Tech: C++, OpenGL, Python

Sep 2019 – Jun 2020 | Sunnyvale, CA

- 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

PROJECTS

Astro Dodge

Tech: Unity, C#

A mobile endless runner game for Android

- Integrated the Google Play API and Mobile Ads SDK to incorporate in-app purchases, cloud saves, and pop-up advertisements
- Ideated and developed HLSL shaders and particle systems to create appealing game aesthetics
- Supported a 3D artist in importing custom-made spaceship models and retargeting pre-existing animations

Domino Simulator

Tech: Unity, C#

A domino structure building sandbox game for PC

- Implemented player-drawn Bézier curves as a streamlined method for placing dominoes
- Transformed game objects into JSON representation to enable storage of player data in a MySQL database
- Participated in group discussions, involving design patterns and UML diagrams, to design overarching code structure

EDUCATION

University of California, Los Angeles

B.S. Computer Science

GPA: 3.75

2015 – 2019

University of California, Los Angeles

Graduate Coursework in Computer Science

2020 – 2022

SKILLS

Programming

C#, C/C++, Objective-C, Python, JavaScript, HTML/CSS, SQL

Tools/Frameworks

Unity, OpenGL, iOS, React, Node.js, Git, Mercurial, Perforce

Design

Figma, Photoshop

ACTIVITIES

UCLA Upsilon Pi Epsilon Honor Society

Tutored weekly sessions for undergraduate students in programming and lower-division computer science courses

UCLA Association for Computing Machinery

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

INTERESTS

Full stack, front end, game development, iOS