# 陆琢 Zhuo Lu

## SELECTED EXPERIENCES

## Apple Inc.

GPU Developer Technology Engineer July 2020-Present

- Working on the team that brought GPU Debugger in Xcode.
- Designing and implementing software tooling for graphics applications development across the Apple platform.

# GPU Developer Technology Intern

June 2019-August 2019

• Worked on the team that brought GPU Debugger in Xcode.

## Slack Technologies, Inc.

Desktop Software Engineering Intern

May 2018-August 2018

- Worked on several diagnostic features for the Slack desktop app.
- Led the design and implementation for a new desktop client updater server endpoint. Added full integration test suites to the CI automation in QA environment.
- Implemented content security violation reporting for the web client.
- Wrote the netLog module in Electron for network activity collection.

## Web Design DeCal

Co-Instructor

May 2018-May 2019

- Gave weekly programming lectures for a class of over 120 enrolled students and auditors, and co-led 7 teaching assistants.
- Continued maintaining and updating the course portal.
- Co-redesigned the course programming curriculum based on feedback from previous semesters in summer 2018.

#### Teaching Assistant

August 2017-May 2018

- Maintained and updated the course portal implemented in Django.
- Added a real-time Q&A queue to be used in lecture in winter 2017.
- Updated course info website and a project showcase site displaying works done by previous students in summer 2017.

## Berkeley Center for New Media Research Assistant

February 2017-May 2017

- Teamed with Ph.D. candidate Juliana Friend from the Department of Anthropology to design and develop the Many-to-Many project website (https://many-to-many.net/), offering an online platform to facilitate ethnographic research.
- Designed and implemented a multilingual CMS with content versioning, a custom front-end MVP, and a RESTful server with LAMP for data query and mutation.

## Cal Performances

Student Ambassador for the Arts

September 2016-May 2020

- Hold post-performance reception events such as "SpeakEasies" for the audience to mingle and to share thoughts about the show, while getting an opportunity to meet the artists.
- Promote Cal Performances events through physical presence or social media on platforms like Facebook, Twitter, and Instagram.
- Managed the "Students' Night Out" committee from September 2017 to September 2019.

## CONTACT

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## **EDUCATION**

University of California, Berkeley

Class of 2020 B.A. Computer Science College of Letters & Science

## **PROJECTS**

- Real-time path tracing with implicit geometries defined by signed distance functions supporting diffuse, mirror and glass BSDF's. Implemented with OpenGL in GLSL and C++ with two project partners. Received artistic mention in course project showcase.
- Codesigning tool for Electron macOS app distribution. Implemented in node.js, published on npm.
- Interactive paper engineering app for designing pop-up books or cards.
   Derived interpolation algorithm for the motion of gullies during paper folding.
   Implemented in JavaScript, rendering backed with WebGL.
- Interactive terrain painting with real-time polygonal mesh extraction by marching cube. Implemented with OpenGL in GLSL and C++.

## **SKILLS**

## **Programming**

C, C++, Objective-C, Swift, Python, Java, HTML, CSS, JavaScript, PHP, SQL.

#### **Creative Tools**

Adobe Photoshop, Illustrator, InDesign, Premiere, After Effects; Blender; Final Cut Pro X