Jessie Yang

jessiejxyang@outlook.com
(630) 743-9329
Website: jjxyang.github.io/site

Education

UC Berkeley Electrical Engineering and Computer Sciences (EECS)
Expected Graduation May 2019

Relevant Coursework

- Artificial Intelligence
- Discrete Math & Probability
- Computer Architecture
- Computer Security
- Algorithms
- Machine Learning
- Internet Archictecture & Protocols
- Computer Graphics
- Computational Photography (in progress)
- Game Design Methods (in progress)

Skills

Proficient with

- Java, Python, C++
- Git, LaTeX

Familiar with

- C, C#
- Unity, libGDX Game Engines
- HTML/CSS, Bootstrap, Javascript, SQL
- Adobe Illustrator, Photoshop, Premiere

Work Experience

Adobe
Software Engineering Intern
May 2018 - Aug 2018 *C++, Java, Java Native Interface, Android SDK/NDK*

- Characterized performance of different still-image import options for the Android version of Project Rush (video-editing app)
- Implemented JPEG & PNG import plug-ins with Java and native code using a JNI bridge to communicate between layers

UC Berkeley EECS Dept.
EE16A, EE16B Head TA
Aug 2016 - Dec 2017 ***EE16A*** *Fall '16* ***EE16B*** *Spring '17, Fall '17*

- Facilitated overall course experience for 400+ students each semester
- Hired and led over 50 TAs, readers, tutors, and academic interns
- Coordinated exams, discussion & lab sections, and other course events

Pure Storage
Software Engineering Intern
May 2017 - Aug 2017 *C++, Java, SQL, Python, Angular.js*

- Created feature that reports per-filesystem I/O performance stats of a storage array
- Built backend service to collect, process, and persist I/O performance stats
- Developed command-line interface and graphical user interface for the service
- Wrote unit tests for each layer and integration tests between layers

WRKSHP (formerly PennyPop)
Android Intern
June 2016 - Aug 2016 *Java, libGDX*

- Developed for Beat Fever on Android with libGDX & in-house engine
- Resolved 200+ bugs and implemented features, including UI elements
- Created internal tools, unit tests, and test screens

Projects

Rigid Body Sim *jaymok.me/CS184-final-project/final.html* *C++, OpenGL/GLSL*
Computer Graphics course final project. Simulation of rigid bodies interacting in physically realistic ways.
• Forward Euler to simulate motion • Discrete Element Method to model collisions • Spatial map to detect collisions

Ray Tracer *jjxyang.github.io/site/projects/path-tracer-part2/writeup.html* *C++, OpenGL/GLSL*
Computer Graphics course project. Implemented routines of physically-based renderer using path-tracing algorithm, e.g:
• Scene intersection • Bounding volume hierarchy optimization • Global illumination • Adaptive sampling
• Glass, mirror, & microfacet materials • Depth of field • Basic GLSL shaders (separate from renderer)

Course Connect *course-connect.herokuapp.com* *jQuery, Socket.IO, Bootstrap, Node.js*
Web app enabling Berkeley students to create listings to find & collaborate with peers in campus study spaces.
Co-developed for "Computing for Social Good" course. Repo here: *github.com/jjxyang/course-connect/*

Extracurriculars

Eta Kappa Nu (HKN) Officer ***Jan. 2017 - Present***

• *Fall '18 - Corresponding Secretary*. Collaborate with EECS Department to organize end-of-semester course evaluations that provide data and feedback for faculty and TAs. Maintain relationship with the National HKN Chapter.

• *Fall '17, Spring '18 - Department Relations Officer*. Worked with EECS Department on department & community affairs. Led a presentation for faculty on undergraduate student trends and concerns. Organized EECS department tours.