Angela Y. Ko

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Education

• University of California, Berkeley Computer Science and Cognitive Science GPA: 3.2 Dec 2017

• Relevant Coursework:

- CS161: Computer Security
- CS162: Operating Systems and Systems Programming
- CS186: Introduction to Databases Systems
- CS184: Computer Graphics and Imaging
- CS188: Artificial Intelligence
- CS170: Efficient Algorithms & Intractable Problems
- CS198: Web Design

- EE16A: Designing Information Devices & Systems
- CS70: Discrete Mathematics and Probability Theory
- CS61C: Great Ideas in Computer Architecture
- CS61B: Data Structures
- CS61A: Structure and Interpretation of Computer Programs

Experience

Kudo3D Inc.,

Software Development Intern

Pleasanton, CA

Summer 2016

- Contributed to an open-sourced, browser-based 3D-printing software using Angular for client-side and Java for server
- Created REST API to interact with printer configurations and to support previewing, customizations, etc.
- Used Git's forking workflow with a small team to develop new features and integrate an existing project (SLAcer.js)

• University of California, Berkeley EECS Department

Undergraduate Student Instructor for EE16A

Berkeley, CA

Jan 2016 - Present

- Taught a 850 person course on Designing Information Devices and Systems at UC Berkeley
- Led three hour long 50-person labs where students built single pixel cameras, touch-screens, and locationing systems
- Tutored students in weekly "homework parties" to enhance students' understanding of the course material

Innovative Design

Video Tier Member

Berkeley, CA

Sept 2015 - Present

- Filmed, produced and edited tailored pro-bono promotional media content for clients both on and off campus
- Provided creative consultancy for organizations e.g Project RISHI's IndieGoGo campaign, Cal Hacks, ASUC
- Designed multiple video infographics in After Effects to achieve slick animations and motion graphics

Class Projects

PintOS (2016):

Implemented priority schedulers, concurrency, syscalls, argument passing, and a unix file system for PintOS. C **Simple Database** (2016):

Created a database with file management, B+ trees, join algos, query optimization, & concurrency control. Java **Malloc** (2016):

Implemented a memory allocator through POSIX interfaces to allocate, reallocate, & deallocate memory blocks. C **HTTP Server** (2016):

Built a HTTP server that handles HTTP GET requests, creates an HTTP proxy, & utilizes HTTP response headers. C **Basic Shell** (2016):

Built a shell with supports for program execution, I/O redirection, signal handling, & background processing. C Pacman MultiAgent Search (2016):

Designed Pacman agents with limited A.I., minimax & expectimax search, and search heuristic optimization. Python **Ray Tracing** (2016):

Created an image renderer via a pathtracing algorithm with ray-scene intersection & physically-based lighting. C++ PageRank (2015):

Designed variations of PageRank using discrete time Markov chains with MapReduce in Apache Spark. Python Gitlet (2015):

Implemented a simplified version control software with commands - commit, branch, merge, & rebase. Java

Skills and Interests

Programming Languages: Java, Python, C, mySQL, HTML/CSS, C++, JQuery, Angular.js **Software:** Git, LATEX, Vim, Adobe After Effects, Adobe Premiere Pro, Final Cut Pro X

Spoken Languages: Fluent in Mandarin Chinese; Proficient in French; Conversational in Japanese, Taiwanese

Interests: Cats, Traveling, Food Adventures, People Watching, Motion Graphics, Videography, Cooking