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# **Amy Wong**

**Education** University of California, Berkeley Summer 2016

Bachelor of Arts, Computer Science

Relevant Algorithms, Database Systems, Artificial Intelligence, Internet Architecture and Protocols, Data Structures, Machine Coursework Structures, Structure and Interpretation of Computer Programs, Discrete Mathematics and Probability, Software Engineering, iOS Development, Advanced Digital Animation, User Interface Design

Experience Elwyn & Jennifer Berlekamp Foundation – Content Developer June 2014 – August 2014, November 2016 – Present

- o Applying mathematics and theories to combinatorial games, created and restructured content aimed at explaining rudiments of combinatorial game theory.
- Produced graphics using Photoshop and Illustrator.

Griddle, CITRIS Social Apps Lab Project - 3D Generalist & Programming Assistant June 2015 - August 2015

- o Participated in the building of an educational video game aimed towards high school students.
- o Updated old shader to new shader that is compatible with Unity 5, applied material to objects, wrote script in C#, and created smokestack animation for towers.

## Computer Science 61A – Lab Assistant August 2013 – August 2014

o In this introductory computer science course, I helped students in lab sections, discussion sections, and office hours with projects, homework, and labs. Topics include data abstraction, recursion, object-oriented programming, and orders of growth.

### **Projects**

- o Curiocity An iOS app for users to find attractions in a city and create a travel plan.
- o Emergency Response A travel safety app for Android wear and mobile devices. This project involved doing fieldwork, rapid prototyping, and user testing throughout the design and implementation of the app. https://www.hackster.io/team-hazy4/emergency-response
- o LyriCal Worked on the front-end of a web app game using HTML, CSS, and JavaScript in which three lines of a random song are generated, and the player has to guess the next line. http://lyricalberkeley.herokuapp.com/
- o Pacman with Bayes Nets Implemented inference algorithms for Bayes Nets, specifically variable elimination and likelihood weighting sampling. These inference algorithms help Pacman determine how to beat the ghosts.
- o Firewall Implemented a basic firewall that monitors and controls the incoming and outgoing network traffic based on applied security rules.
- o Network AI An implementation of game tree search with alpha-beta pruning for the game Network, which plays against a human player or another computer program. Written in Java.
- o Performance Optimization Used SIMD instructions, cache blocking, OpenMP, and loop unrolling to optimize an eigenvector-finding algorithm. Written in C.
- o Bandits 3D animated short film. My role was modeling assets, creating facial blend shapes, set dressing, character design, and story development. <a href="https://youtu.be/DssS3vTlDao">https://youtu.be/DssS3vTlDao</a>

Activities Webmaster and Historian Officer – Cal Opportunity Scholars Association August 2014 – May 2015

- O Updated the website to have the most up-to-date information.
- o Organized social events for members to meet faculty members and other scholars.

Webmaster and Historian Intern - Cal Opportunity Scholars Association August 2013 - May 2014

o Monitored the blog page, sent out emails, and designed the initial look of the website.

CS Illustrated – UC Berkeley January 2013 – May 2014

o Illustrated computer science topics to assist students in fundamental concepts of programming.

Skills Languages: Python, Java, C, C#, Scheme, SQL, Ruby on Rails, Swift

Web: HTML, CSS, JavaScript

**Graphic:** Adobe Photoshop, Adobe Illustrator

Other: Git, Unix, Android Studio, Autodesk Maya, Unity, LaTeX, Xcode