Alex A. Liu

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Local Address:
1787 Franklin Street
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Education

University of California, Berkeley   August 2011 – May 2015
B.S. in Electrical Engineering and Computer Science
GPA of 3.38/4

Relevant Course Work
- Introduction to the Internet
- Introduction to Database Systems
- Foundations of Computer Graphics
- Computer Security
- Software Engineering
- Data Structures
- Introduction to Artificial Intelligence
- Efficient Algorithms and Intractable Problems
- Programming Languages and Compilers

Experience

Software Intern, Arista Networks   May 2014 – August 2014
- Worked primarily on SDN team, specifically to separate the model and view of a subset of 'show' commands, making JSON representations of the data requestable through an Arista switch's web client and allowing the data to be easily parsable for internal testing

Web Developer, P.I.C. Your Future, http://py-bcnm.berkeley.edu   August 2013 – May 2015
- Worked full stack to refactor and transition the 'selfie' editing page to Angular, while also continuing to refine and add features in order to create an application that uses visual storytelling practices like the "selfie" to help improve college access for underprivileged high school students and provide students with a tool to navigate the college process

Activities

External VP, Out in Science, Technology, Engineering, and Mathematics (oSTEM)   August 2012 – May 2015
- Worked to increase external professional relationships for the organisation by reaching out to companies, coordinating infosessions and sponsorships between them and oSTEM, allowing the members to network with LGBTQ professionals
- Attended regular meetings, participated in the Berkeley Project with oSTEM, helped coordinate oSTEM's booth at Engineering 4 Kids Day, attended LGBTQ professional networking conferences at Facebook HQ and Google's New York office

Lab Assistant, CS61C, UC Berkeley   January 2013 - December 2013
- Streamlined lab section by assisting in lab check-offs and answering students' questions to help create a more enjoyable, smoother lab experience for everyone

Work

Teaching Assistant, Folsom Piano Academy, Folsom, CA   2010 - 2011, Summer 2012
- Utilised over 11 years of experience in piano performance to assist in teaching the children's group classes in beginner to intermediate piano music, providing each student with more attention and time

Skills

Web
- HTML/CSS, JavaScript with JQuery and some Angular, d3, and Kinetic experience

Programming Languages
- Python, Ruby/Rails/Sinatra, Java, C, C++, MIPS (Assembly), Unix Command Line

Natural Languages
- English, Mandarin Chinese

Programming Experiences
- Implemented a basic ray tracer from scratch, interpreted Bezier patches to render various objects (including the standard Utah teapot), and wrote a basic fluid simulation using smoothed particle hydrodynamics
- Parallelism with Intel's SSE intrinsics and OpenMP to increase the speed of matrix multiplication approximately tenfold on average
- MapReduce using Apache Hadoop framework on Amazon's EC2 servers to analyse large amounts of text data for the co-occurrence rate of target phrases in the data