Chenyang Yuan

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http://www.github.com/yuanchenyang http://www.chenyang.co

Education

Double Major in Computer Science and Physics Expected Graduation: 2016
The University of Berkeley at California, Berkeley, CA GPA: 3.939 (Technical: 4.00)

Technical Skills

Proficient in Python, Haskell, Java, C, Javascript, LaTeX, Emacs
Experience in Rust, Scheme, jQuery, HTML, Hadoop, Android, SQL, Assembly

Work Experience

Undergraduate Student Researcher, *UC Berkeley* *Spring 2014 – Present*

- I work with Professor Ras Bodik on the synthesis of a layout engine for an experimental browser, Servo. We specify CSS layout rules with an attribute grammar which compiles into a layout engine that takes in HTML and CSS and outputs the positions and sizes of every element. This layout engine, generated in Rust, then fits into the Servo browser.

Undergraduate Student Instructor for CS61A, *UC Berkeley* *Fall 2013 – Present*

- Teach sections and labs, holds office hours
- Help write the autograder for projects
- Wrote Javascript interpreters for Scheme and Logic languages used in the class, so that students can interpret code on their browsers without installing interpreters on their machines.
- Ran and maintained the codereview system used to give students composition feedback from readers

Software Engineering Intern, *Clover* *July–August 2013*

- Helped improve internal tools
- Built an API auto-documentation system; designed and build an API Explorer: `https://www.clover.com/api_explorer`
- Created demo app using Clover's API: `https://github.com/clover/example-server`

Selected Projects

Facebook Group Archiver `http://archiver.chenyang.co`
A tool for saving Facebook groups in a local database and doing comprehensive searches locally. After the first download, it will sync the local database with the Facebook group during each run. Also includes a web-interface for stats, searching and doing database queries.

Interactive SICP Textbook `http://xuanji.appspot.com/isicp/1-1-elements.html`
Made an interactive version of the classic Structure and Interpretation of Computer Programs book with my friend. I created the asynchronous Javascript-based Scheme interpreter used on the website.

WebGL Particle Simulator `http://www.chenyang.co/particles`
A simulation with thousands of particles attracted by gravity, created with WebGL and Javascript.

Python Control Flow Visualizer `http://pyvisualizer.chenyang.co`
An online tool that run python programs and visualize the code branching using D3.js

Relevant Awards

First Place, Cal vs Stanford Big Hack *Apr 2013*
Created a scheme interpreter in C on my TI-89 graphing calculator
Third Place, Hackers at Berkeley HackJam *Apr 2013*
Made an animation sequence on my TI-89 graphing calculator
Honorable Mention, Facebook Nor-Cal Hackathon 2013 *Oct 2013*
Built a online Python code branching visualizer.
Honorable Mention, Facebook Battle of the Bay Hackathon 2012 *Oct 2012*
Build a logic gate simulator with a graphical interface in Python.
Rank 15, Hackerrank Back to School Hackathon 2013 *Feb 2013*