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, Javascript, Java, C, LaTeX, Emacs
Experience in Rust, Scheme, jQuery, d3, 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. I helped built a backend which generates a layout engine in Rust, which replaces the hand-written layout engine in Servo. I am also working on writing a synthesis algorithm for incremental layout schedules, implemented in Rosette, a domain specific language for interfacing with SAT/SMT solvers.

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*

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