

# CHENYANG YUAN

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

## EDUCATION

### Double Major in Computer Science and Physics

*The University of Berkeley at California, Berkeley, CA*

Expected Graduation: 2016

GPA: 3.977 (Technical: 4.00)

## TECHNICAL SKILLS

**Proficient in** Python, Javascript, Emacs, jQuery, Java, L<sup>A</sup>T<sub>E</sub>X

**Experience in** C, Scheme, Haskell, HTML, Hadoop, Android, SQL, Assembly

## WORK EXPERIENCE

### Undergraduate Student Instructor for CS61A, UC Berkeley

*Fall 2013 – Present*

- I teach sections, prepare discussion notes and labs, help write the autograder for projects and hold office hours.

### 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](https://www.clover.com/api_explorer)
- Created demo app using Clover's API: <https://github.com/clover/example-server>

### Reader for CS61A, UC Berkeley

*Spring 2013*

- I provided feedback and comments for students' code and held debugging sessions

## 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

### Scheme on TI-89

<https://github.com/yuanchenyang/TI89-Scheme>

Built a Scheme interpreter from scratch that runs on my TI-89 graphing calculator. It is written in C and supports a small subset of the Scheme language.

### Building a Computer from Scratch

<https://github.com/yuanchenyang/My-EOCS>

Following the instructions from a book called the Elements of Computing Systems, I built a CPU from logic gates using a hardware simulator. Then I proceeded to create an assembler for the CPU and a VM simulator that takes in VM code (similar to java bytecode) and outputs assembly code.

## 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*