

# Yichen Liu

Apartment 192, 777 Wt Middlefield Rd, Mountain View, 94043

+1 650 864-2046 • yichenl@andrew.cmu.edu • www.rivo.me

Graduate student seeking for summer internship position, completing the first year of a master's degree, with passion for coding, enjoy working on my own initiative or in a team.

## Education

### Academic Qualifications.....

- **Carnegie Mellon University** **Silicon Valley Campus**  
*M.S in Electrical and Computer Engineering, Predicted First Class* 2014–2015
- **Sun Yat-Sen University** **Guangzhou**  
*B.S in Computer Science, GPA: 3.8/4.0* 2010–2014

### Notable Projects.....

- **Cloud Computing Project:** *'Development of a Twitter Analytics Web Service'*  
I was the leader of a three person team. This project aimed to provide query services inside terabytes of real-world data from twitter with high throughput requirement(15,000rps). Our project was based on Amazon Web Service. My work included construction of frontend server, maintenance of two backend database(MySQL and Hbase), and proxy between them.
- **Cineaste:** *'Development of a Movie Recommendation System'*  
I created a personalized movie recommendation system for Douban users (China's version of IMDB). During this project, I crawled the ratings from douban, implemented ALS(a collaborative filtering algorithm) from scratch, built and deployed a website for users to browse their recommendations.
- **Evolutionary Algorithm Projects:** *'EA Approach for Traffic Flow Management and Test Case Generation'*  
I adapted evolutionary algorithms in two projects, including optimal control and software test problems. I implemented two algorithms(Genetic Algorithm and Differential Evolution) for different scenarios.

### Awards.....

- **Yahoo! Hack Day Beijing** *Excellence Award*
- **China National Mathematic Modeling Contest** *Excellence Award*
- **Sun Yat-Sen University Computer Programming Contest** *Second Award*
- **Sun Yat-Sen University Scholarship** *Second Award*

## Previous Employment

- **Tencent Games** **Shenzhen**  
*Backend Development Intern* July 2013–September 2013  
I was responsible for developing a monitoring system for moneyflows inside video games. I worked in a team with four other members. My work mainly included data analysis, model design and implementation.

## Technical and Personal skills

- **Programming Languages:** Advanced in: C, C++, Python,  
Also basic ability with: Java, Scala, Go, PHP, Javascript, HTML, LaTeX.
- **Industry Skills:** Unix/Linux (Advanced), MySQL (Advanced), AWS (Advanced), Scipy/Numpy (Advanced), Scikit-Learn (Advanced), Hadoop (Intermediate), Hbase (Intermediate), Weka (Intermediate), Nginx (Intermediate), Matplotlib (Intermediate), Hive (Basic), Pig (Basic), GraphLab (Basic), Mahout (Basic).
- **Communication Skills:** English (Fluent), Chinese (Fluent)