

# Ryan Luo

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## Education:

**Pomona College**, Claremont, CA

**Aug 2012-present**

**Bachelor of Science, GPA: 4.0**

- **Computer Science Major**

### Relevant Coursework:

- **AP Computer Science A, self-studied** in place of CSI (Java)
- **CS II** (SML, python, C) (current grade: A)
- **Calculus II** (grade: A), **Linear Algebra** (current grade: A+)

## Work/Volunteer and Leadership Experience:

**Pomona College Molecular Biology Lab Research Assistant**

**Jan. 2013-present**

- Utilize molecular genetic approaches to engineer homing endonucleases

**Pomona College Orchestra Manager**

**Aug. 2012-present**

- Organize 1500 pages of orchestra music and set up stage for 30 rehearsals and 4 concerts a semester

**President of Impromptu Music Club in Mission San Jose High School**

**Dec. 2010-Jun. 2012**

- Arranged 30 performances with 100+ musicians (total) at 8 retirement homes for over 400 patients

**Concertmaster of California Youth Symphony**

**Sept. 2010-Jun. 2012**

- Student leader on an international tour to New Zealand, in charge of 150+ musicians
- Representative for the California Youth Symphony on the "Good Morning New Zealand" show

## Projects:

**College Event Calendar/Map**

**Nov. 2012**

- Java-based with GWT plugin. Users click on the map in order to create an event, and the map would be viewable to all students at the college to give a spatial representation of campus events.

**Chemical Reaction Calculator/Predictor**

**Dec. 2012**

- Java-based with GWT plugin. User inputs (basic) chemical elements on GUI and program outputs products. Second tab predicts electrochemical reactions with spatial representation of galvanic cell.

**Battle Ship Game and AI Player**

**Mar. 2013**

- Java-based with GWT plugin. A grid provides a layout for ship tokens that can move freely around the grid. Develop AI for ships to calculate "best moves" given one ship's location relative to another's.

**Simple Encryptor**

**Aug. 2011**

- Java-based GUI. Users input strings, encryptor shifts all ASCII values of chars in string and adds them to ASCII values of chars in a "key," outputting a decode key and the encoded message.

## Skills:

**Familiar** with programming languages Java, SML, C, Python, HTML/CSS

**Experience with following tools:** MS Office, Adobe Photoshop

**Learning** Cisco Certified Network Assistant (CCNA) Fundamental Networking material

## Awards:

**Pomona College Scholar Distinction**

**Jan. 2013**

- Academic distinction

**Nominated for ID1 Paper Prize (Writing Prize at Pomona College)**

**Jan. 2013**

- Nominated for excellent student writing in the Pomona College ID1 mandatory writing course

**Pomona College Concerto Competition**

**Nov. 2012**

- Competition open to the Claremont College Consortium for the Pomona College Orchestra

**5C Bi-Annual Computer Programming Hackathon**

**Nov. 2012**

- Placed 2<sup>nd</sup> in a competition sponsored by Amazon, Originate, among others