

## Patrick Yu

---

2614 Warring St. Apt 5  
Berkeley, CA 94704  
(714) 651-5438

### EDUCATION

*Bachelor of Arts, May 2015* Applied Mathematics  
University of California, Berkeley  
Concentration: Computer Science

### EXPERIENCE

*Treasurer, Head Coordinator* 2013 - 2015  
Project S.M.I.L.E.

- Board member for Project S.M.I.L.E., holding a variety of positions.
- Worked closely with the ASUC, LEAD Center, and Public Service Center, organizing events for 80+ children and mentors.

*Tutor, Mathematics* 2012 - 2014  
Irvine, Ca

- Tutored students of various ages in Math and Science subjects.

### PROJECTS

Image Recognition

- Designed and implemented supervised machine learning algorithms to identify written numbers in images.

Spam Filter

- Designed and implemented algorithms to create a spam filter for email data.

Image compression

- Created singular value decomposition processes to create a percentage based image compression program to decrease the storage size for the image.

PageRank

- Designed ranking system using a version of the PageRank algorithm that ranked actors using IMDb ratings through the Beautiful Soup Python package.

### TECHNICAL SKILLS

*Languages & Software:* Python, Java, Matlab, Scheme, Latex, R, Ruby, Git, SQL, Spark, Excel VBA  
*Operating Systems:* Windows, Mac, Unix

### COURSE WORK

- Multivariable Calculus
- Linear Algebra
- Differential Equations
- Discrete Mathematics
- Numerical Analysis
- Abstract Algebra
- Cryptography
- Structure of Computer Programs
- Data Structures
- Efficient Algorithms
- Probability
- Stochastic Processes
- Machine Learning
- Computing with Data