Patrick N. Yu

2614 Warring St
Berkeley, CA 94704
patrick.n.yu@berkeley.edu
(714) 651-5438

EDUCATION

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

COMPUTER SKILLS

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

MAJOR CLASSES

- Multivariable Calculus
- Linear Algebra
- Differential Equations
- Discrete Mathematics
- Real Analysis
- Abstract Algebra
- Cryptography
- Numerical Analysis
- Complex Analysis
- Structure of Computer Programs
- Data Structures
- Efficient Algorithms
- Probability and Random Processes
- Computing with Data

EXPERIENCE

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

- Board member for Project S.M.I.L.E. and held a variety of positions.
- Worked closely with the ASUC, LEAD Center, and Public Service Center, handling a variety of aspects of the club.

Seminar Organizer, Education 97/197 2013 - 2015
University of California, Berkeley

- Organized a seminar which brought in speakers for different topics in education.

PROJECTS

Image Recognition

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

Spam Filter

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

Image compression

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

Heat Maps

- Executed Crank-Nicolson finite difference method to solve the heat equation and track smells moving across a room.

PageRank

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