Patrick Yu

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EDUCATION

Bachelor of Arts, Applied Mathematics. May 2015
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.
- Taught a seminar class where I brought in speakers to talk about different topics in education.
- Provided leadership and training to mentors and board members.

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 k-nearest neighbor machine learning algorithms to identity written numbers in jpg images.

Spam Filter

- Constructed random forest algorithms to create a spam filter for email data.

Image Compression

- Used singular value decomposition to compress the storage size of png files.

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/Octave, 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