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 identify handwritten numbers.

Spam Filter

• Trained models for varying amounts of decision trees in a random forest algorithm to classify emails as spam or not spam.

Image Compression

• Used singular value decomposition to compress image file size based on percentage.

PageRank

• Applied Google's PageRank algorithm to rank actors based on IMDb ratings through the Beautiful Soup Python package.

TECHNICAL SKILLS

Languages & Software: Python, Java, Matlab/Octave, Scheme, Latex, R, Ruby, Git, SQL, Spark, C++

Operating Systems: Windows, Mac, Unix

COURSE WORK

- Multivariable Calculus
- Linear and Abstract Algebra
- Differential Equations
- Discrete Mathematics
- Real and Numerical Analysis
- Cryptography

- Data Structures
- Efficient Algorithms
- Probability
- Stochastic Processes
- Machine Learning
- Computing with Data