

ALAN YAO
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Academic Record

2012-Present University of California, Berkeley

Electrical Engineering and Computer Science. GPA 3.88

Intended Graduation: Spring 2016

CS CLASSES CS170 (Algorithms), CS184 (Graphics), CS161 (Security), CS188 (AI), CS194-26 (Computational Photography), CS162 (OS), CS189 (Machine Learning), CS274 (Computational Geometry), CS280 (Computer Vision)

OTHER Math 113 (Abstract Algebra), EE126 (Probability and Random Processes)

Work Experience

- 2014 SOFTWARE DEVELOPMENT INTERN. Full stack development in PHP. Wrote Solr search backend indexing 30m+ documents of varying categories, and wrote algorithms for relevancy sorting, autocompletion, and fuzzy matching.
Crunchyroll
- 2014 GSI for CS61B/CS61BL. Lectured, taught lab and discussion, wrote student projects and autograding framework.
UC Berkeley
- 2013-2014 READER for CS170 (algorithms) and CS61B (data structures). Graded homeworks and provided feedback.
UC Berkeley

Projects

- SCHOOL RELATED **Raytracer** - Distributed raytracing on obj file inputs, with acceleration data structures for image rendering.
Inverse Kinematics Solver - Uses the inverse jacobian method to smoothly animate predefined movement paths.
Gradient Domain Blending - Finds the least squares solution to the Poisson equations for smooth image blending.
Face/Image morphing - Warps images from one to another on predefined and automatically detected meshes. Computes intermediate faces, image mosaics, and various other applications.
Automatic Image Stitching - detect correspondences between images and create a projective transform for image stitching, insertion, and rectification
- PERSONAL HKN website - Front end and back end development in Rails.
HKN servers - Sysadmin work on Apache webserver and LDAP.

Things I'm Good At

- LANGUAGES: Python, Ruby/Rails, PHP, Bash, Java, C++, C, MATLAB
- SOFTWARE: Standard unix (httpd, sed, git, etc), Photoshop, L^AT_EX, OpenGL, StarCraft 2
- ACTUAL LANGUAGES Chinese, English, some Japanese

Other Involvement

2013-PRESENT ETA KAPPA NU, COMPSERV OFFICER

2012-2013 ESPORTS AT BERKELEY, *President and Competitive Coordinator*

2013-Present CROSSROADS CHRISTIAN FELLOWSHIP, Council