ALAN YAO

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Academic Record

2012-Present University of California, Berkeley

Electrical Engineering and Computer Science. GPA 3.89

Intended Graduation: Spring 2016

CS CLASSES CS170 (Algorithms), CS184 (Graphics), CS161 (Security), CS188 (AI), CS194-26

(Computational Photography), CS162 (OS)

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 al-

gorithms for relevancy sorting, autocompletion, and fuzzy matching.

Crunchyroll

2014 GSI for CS61BL. Lectured, taught lab and wrote all autograders.

UC Berkeley

2014 READER for CS170 (algorithms). Graded homeworks and provided feedback.

UC Berkeley

2013 Reader for CS61B (data structures). Graded and debugged student projects.

UC Berkeley

Projects

SCHOOL RELATED Raytracer - Distributed raytracing on obj file inputs, with acceleration data struc-

tures for image rendering.

Inverse Kinematics Solver - Uses the inverse jacobian method to smoothly anim-

ate predefined movement paths.

Gradient Domain Blending - Finds the least squares solution to the Poisson equa-

tions for smooth image blending.

Face/Image morphing - Warps images from one to another on predefined and automatically detected meshes. Computes intermediate faces, image mosiacs, and vari-

ous 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, LATEX, 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