
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, projects; provided feedback.
UC Berkeley

Projects

Raytracer - Distributed raytracing on obj file inputs, with acceleration data structures for image rendering.

Inverse Kinematics - Uses the inverse jacobian method to smoothly animate predefined movement paths.

Gradient Domain Blending - 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.

Neural Network - Uses a 3 layer NN trained on the GPU with batch gradient descent for MNIST digit classification, with 1.5% classification error.

Dynamic Viewing - Uses multi-scale template matching based on the user's face location to adjust the viewing angle, direction, and camera location in a minecraft game.

HKN compserv - Front/back end development in Rails; sysadmin work on Apache webserver and LDAP.

Things I'm Good At

LANGUAGES: Python, MATLAB, C++, Java, C, Ruby/Rails, PHP, Bash

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