HELEN (HUIMING) HAN

408-250-2296 hhan@berkeley.edu <u>github.com/h94h12</u> <u>helenhan.me</u>

Education

UC Berkeley — Computer Science B.A.

Expected Graduation: Dec 2015

Relevant Courses: Algorithms, Intro to Artificial Intelligence, Computer Graphics, Engineering Parallel Software

In progress: Software Engineering, Networking

GPA: 3.615

Skills

Proficient: Python, Java, C++, C

Basic: PHP, MatLab, HTML/CSS, Javascript, Android

Adobe Photoshop, Adobe Dreamweaver, Autodesk Maya, Jekyll

Experience

Software Engineering Intern, Visa Inc. — May-August 2014 Payment Acceptance at Cybersource

Helped develop a new payment gateway in Java. Implemented gateway validation engine using custom Spring framework. Developed the daemon in between the merchant facing frontend and payment processor.

Research Assistant, UC Berkeley Vision and Learning Center — Jan-May 2013 vislab.berkeleyvision.org

Developed web scraper using Python and MongoDB to gather large dataset of images for computer vision research. Paper published.

Research Assistant, Bay Area IP LLC. — Sept-Dec 2013

Research and development work to achieve robot humanoid hand vision control. Used OpenCV to track the position of a laser in a video stream.

Technical Intern, StrollerHikes — June 2011-July 2012 strollerhikes.com/find-a-hike

Develop the Find-A-Hike web app in PHP, using Google Maps. Designed and developed web pages using Adobe InDesign and Dreamweaver. Developed Android mobile version of Find-A-Hike.

Projects

Tumscraper github.com/h94h12/Tumscrapr Python, OpenCV

Web crawler that scrapes the blogs of two Tumblr users and estimates the similarity of their aesthetic preferences. Won Best Beginners Hack at HackJam 2014.

Procedural Terrain Generation <u>github.com/h94h12/MT-Terrain</u> C++, OpenGL

Generates a pseudo-random lake scene complete with reflections, clouds and lighting effects using isosurface extraction, density functions, and Perlin noise

Parallelized Ray Tracer github.com/zhixu/raytracer-SSE-AABB C++, OpenMP

OpenGL independent implementation of a ray tracer. Optimized to run 2800 times faster than serial code using SSE intrinsics, OpenMP, and AABB trees.

Publications

Recognizing Image Style at BMVC 2014

arxiv.org/pdf/1311.3715.pdf

Sergey Karayev, Matthew Trentacoste, **Helen Han**, Aseem Agarwala, Trevor Darrell, Aaron Hertzmann, Holger Winnemöller