
HELEN (HUIMING) HAN

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helenhan.me

github.com/h94h12

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.

Education

UC Berkeley — Computer Science B.A.

Expected Graduation: Dec 2015

GPA: 3.615

Relevant Courses

Computer Graphics, Engineering Parallel Software, Intro to Artificial Intelligence, Algorithms

Projects

Tumscraper

github.com/h94h12/Tumscraper

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

github.com/h94h12/MT-Terrain

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
