

Zhouyuan Li

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EDUCATION

Graduate student, University of Wisconsin-Madison, master degree expected in May, 2013

Sep. 2011 – Now

Department of Computer Sciences

GPA (First Year): 3.75/4

Bachelor of Engineering of Tsinghua University

Sep. 2007 – Jul. 2008

Department of Mathematics

Sep. 2008 – Jul. 2011

Department of Electronic Engineering

GPA (First Three Years): 92.31/100 rank: 6/232

RESEARCH EXPERIENCE

Master's Research

ECCV 2012 Paper: Local Label Descriptor for Example based Semantic Image Labeling

<http://pages.cs.wisc.edu/~lizy/papers/eccv-seg.pdf>

Use concatenation of label histograms to solve label patch misalignment issue

Approximate Label map as a sparse convex combination of exemplar descriptors in the training data

Incorporate Low level image over-segmentation to improve efficiency

NIPS 2012 Submission: Structured Label Propagation in an Ensemble of Directed Acyclic Graph

Propose a Semi-supervised structured learning based on energy minimization using an ensemble of directed acyclic graphs that consist of overlapping local cliques which propagate labels from training data to testing data

Computer Graphics Project

Requirement: most updated Google Chrome and WebGL. Demo video included in the same folder

3D first perspective shooting game: the Rise of Monsters

<http://pages.cs.wisc.edu/~lizy/games/project2/index.html> , demo.html , demo.mp4 , screenshot.html

3D first perspective horrendous and adventurous game: Insane Asylum

<http://pages.cs.wisc.edu/~lizy/games/project3/index.html> , demo.html , demo.mp4 , screenshot.html

Bachelor's Research

Automatic Robot Control ----- made and programmed a robot that can move and grab boxes

Speech Recognition ----- recognized list of words using HMM model

Human Flow Tracking ----- Tracked passers-by in two videos with very high accuracy using Hough

Human Detection ----- Used shape contours and improved boosting for human detection

Stereo Vision in Vehicle Detection ----- Reconstructed 3D models of vehicles based on two images using SIFT key point correspondence

ADDITIONAL

First Prize Scholarship Every Year for Academic Outstanding Student in Tsinghua

Proficient in math, C++, Java, Javascript, Python, Perl, Matlab, CUDA and Condor