Wenzheng Chen

+86 18769781558 chen1474147@gmail.com No.1500, Road Shunhua, Jinan, Shandong, China

EDUCATION 2014-present, Master candidate of Computer Science in Computer Science and Technology College, Shandong University.

2010-2014, Bachelor of Computer Science in Taishan College, Shandong University.

PUBLICATION Wenzheng Chen, Huan Wang, Yangyan Li, Hao Su, Zhenhua Wang, Changhe Tu, Dani Lischinski, Daniel Cohen-Or, Baoquan Chen. Synthesizing Training Images for Boosting Human 3D Pose Estimation. 3D Vision, 2016, Oral.

> Huayong Xu, Yangyan Li, <u>Wenzheng Chen</u>, Dani Lischinski, Daniel Cohen-Or, Baoquan Chen. A Holistic Approach for Data-Driven Object Cutout. Proc. Asian Conference on Computer Vision (ACCV), 2016.

> Qiong Zeng, <u>Wenzheng Chen</u>, Huan Wang, Changhe Tu, Daniel Cohen-Or, Dani Lischinski, Baoquan Chen. Hallucinating Stereoscopy from a Single Image. Computer Graphics Forum, 34(2), 2015 (Proc. Eurographics).

Wang Bin, <u>Chen Wenzheng</u>, Zhong Fan, Tu Changhe, Qin Xueying, Peng Qunsheng. RGB-D Video Segmentation via Geodesic Spatio-Temporal Propagation. Journal of Computer-Aided Design & Computer Graphics, 10, 2015.

RESEARCH 2014.9-2016.9, Deep 3D Pose

In this project, we aim to predict 3D human pose from a single image. To make it fully automatic, we employ Deep Learning to build an end-to-end system. To dress the problem of lacking proper training data, we use synthetic data to train and real data to test. What's more, to bridge the gap between synthetic data and real data, we use domain adaptation to project the two different data into the same feature space. Our work out-performs existing state of the art. This work has been accepted by Proc. 3D Vision, 2016, as an Oral paper.

2015.11-2016.1, Instance Cutout

In this project, we aim to segment a single object from a complex image. In contrast to existing cutout methods, which are based mainly on low-level image analysis, we propose a more holistic approach, which considers the entire shape of the object of interest by leveraging higher-level image analysis and learnt global shape priors. This work has been accepted by Proc. Asian Conference on Computer Vision (ACCV), 2016.

2013.9-2014.7, 3D Hallucination

Given a segmented image as input we produce a stereo pair (or a motion paral-

lax animation) by hallucinating plausible 3D geometry for the scene. First, segments are depth-sorted using simple depth and occlusion cues. Next, the geometry and texture of each object is completed using symmetry and convexity priors. Finally, we infer a depth placement for each object. This work has been published in Proc. Eurographics, 2015.

2013.3-2013.7, Shaking Video Segmentation

In this project, we aim to segment a shaking video. We formulate a shaking video as the combination of translation and rotation, and use corresponding feature points to calibrate the video. This work has been published in Proc. Chinagraph, 2014.

EXPERIENCE 2016.7-2016.8, Face Modeling

In this project, we aim to build the corresponding face model for a given image. We employ BFM parametric face model, which decomposes a face model into the combination of shape and expression parameters. First, we detect 2D face feature points in the image. Then, we estimate shape, expression and camera parameters by minimize the projection error.

2016.3-2016.4, Exchange in Israel

I am happy to be in exchange to Tel Aviv University, Israel for one month, working with Dr. Yangyan Li, Dr. Zhenhua Wang, Prof. Dani Lischinski and Prof.Daniel Cohen-Or. In this period, we mainly focused on how to make full use of synthetic data. Finally we adopted domain adaptation to bridge the gap between synthetic data and real data. We demonstrate that it can significantly improve the performance.

AWARDS2014, First Prize of Excellent Student Scholarship in Shandong University
2014, First Prize of China Undergraduate Mathematical Contest in Modeling, Shan-
dong Division
2012, Honorable Mention of MCM(Mathematical Contest In Modeling)
2011, Third Prize of China Undergraduate Mathematical Contest, Shandong Division
2011-2015, Third Prize of Excellent Student Scholarship in Shandong University

SKILLSExperienced in C/C++ and Matlab, especially in calling C++ in MatlabExperienced in OpenCV and OpenGL, especially in image processingExperienced in Caffe and Deep Learning methods, familiar with Caffe source codeLong time working in Linux system, from Ubuntu 11 to 14

BLOG

Personal website & Technology blog:

- http://irc.cs.sdu.edu.cn/ wenzheng/
- http://blog.csdn.net/lcbwlx