

Zhe Wang

CONTACT INFORMATION	3rd year PhD Student Department of Computer Science The University of Arizona	Cell: +1-(520)3699297 E-mail: zhew@email.arizona.edu Web: www.z-wang.com
RESEARCH INTERESTS	Big Data Visualization, Exploratory Data Analysis, Machine Learning, HCI	
EDUCATION	The University of Arizona Tucson, AZ, USA PhD Student, Department of Computer Science <ul style="list-style-type: none">• Advisor: Dr. Carlos Scheidegger• I also worked with Dr. Richard T. Snodgrass Chinese Academy of Sciences Beijing, China M.S., Institute of Computing Technology (ICT) <ul style="list-style-type: none">• Advisor: Dr. Hong Liu Northeast Normal University Changchun, China B.E., College of Software Engineering <ul style="list-style-type: none">• Major: Software Engineering	Aug. 2014 to present Sep. 2011 to June 2014 Sep. 2007 to June 2011
RESEARCH PROJECTS	Gaussian Cubes (Sep. 2015 to present) <ul style="list-style-type: none">• Real-Time Modeling for Visual Exploration of Large Multidimensional Datasets Light Curve Visualization (May 2015 to Dec. 2015) <ul style="list-style-type: none">• Interactive visualization of astronomy light curve data. ANTARES (Aug. 2014 to present) <ul style="list-style-type: none">• The Arizona-NOAO Temporal Analysis and Response to Events System• Architecture Team Member (Aug. 2014 to Sep. 2016)• Visualization Team Member (Aug. 2015 to present)• Chief Programmer (Aug. 2015 to Sep. 2016) Obstacle Avoidance System for the Blind (June 2012 to May 2014 - M.S. Thesis Project) <ul style="list-style-type: none">• An electronic travel aid to help the visually impaired walk safely using RGB-D sensors• Primary Researcher & Programmer Crowd Density Estimation (Sep. 2011 to June 2012) <ul style="list-style-type: none">• Propose a novel feature for crowd density estimation: the Local Binary Pattern Co-Occurrence Matrix• Primary Researcher & Programmer	
PUBLICATIONS	<p>[1] Zhe Wang, Nivan Ferreira, Youhao Wei, Aarth Bhaskar, Carlos Scheidegger. Gaussian Cubes: Real-Time Modeling for Visual Exploration of Large Multidimensional Datasets. <i>IEEE InfoVis 2016, IEEE TVCG</i>.</p> <p>[2] Abhijit Saha, Zhe Wang, Thomas Matheson, et al. "ANTARES: Progress towards building a Broker of time-domain alerts". In: <i>Proc. SPIE 9910, Observatory Operations: Strategies, Processes, and Systems VI, 99100F</i> (July 18, 2016)</p>	

- [3] **Zhe Wang**, Hong Liu, Xiangdong Wang, and Yueliang Qian. Segment and Label Indoor Scene based on RGB-D for the Visually Impaired. In: *International Conference on Multimedia Modeling(MMM)*, 2014.
- [4] Hong Liu, **Zhe Wang**, Xiangdong Wang, Guoying Zhao, and Yueliang Qian. Adaptive Scene Segmentation and Obstacle Detection for the Blind. *Journal of Computer-Aided Design and Computer Graphics(JCAD)*, 25(12), 1818-1825, 2013.
- [5] **Zhe Wang**, Hong Liu, Yueliang Qian, and Tao Xu. Real-Time Plane Segmentation and Obstacle Detection of 3D Point Clouds for Indoor Scenes. In: *The 2nd Workshop on Consumer Depth Cameras for Computer Vision, in conjunction with European Conference on Computer Vision (ECCV)*, 2012.
- [6] **Zhe Wang**, Hong Liu, Yueliang Qian, and Tao Xu. Crowd Density Estimation Based On Local Binary Pattern Co-Occurrence Matrix. In: *the 2nd IEEE International Workshop on Advances in Automated Multimedia Surveillance for Public Safety, in conjunction with IEEE International Conference on Multimedia and Expo (ICME)*, 2012.
- [7] Tao Xu, Hong Liu, Yueliang Qian and **Zhe Wang**. A Fast and Roust Pedestrian Detection Framework based on Static and Dynamic Information. In: *IEEE International Conference on Multimedia and Expo (ICME)*. 2012.

WORK
EXPERIENCE

Department of Computer Science, The University of Arizona

Tucson, AZ, USA

- Research Assistant Aug. 2014 to present

Institute of Computing Technology, Chinese Academy of Science

Beijing, China

- Research Assistant Sep. 2011 to June 2014

Jingshi Information Technology Co., Ltd.

Hangzhou, China

- Co-Founder Apr. 2011 to July 2013

IDEAL Research Institute of Information Technology, Northeast Normal University

Changchun, China

- Research Assistant Sep. 2008 to Sep. 2010

AWARDS

- Dongshi Medal, NENU (**top 38** students of the university) (2011)
- National Second Prize in Microsoft Imagine Cup Software Design (**top 3** projects in China) (2010)
- National Second Prize in Microsoft Imagine Cup Multipoint Education Award (**top 2** projects in China) (2009)
- Presidential Scholarship, NENU (**top 1%** students) (2008, 2009, 2010, 2011)

SKILLS

Programing Language: Python, C/C++, Javascript, SQL,
Library and Tools: D3, Numpy, Scipy, OpenCV, PCL, Matplotlib