ZHENSONG ZHANG

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EDUCATION

University of Chinese Academy of Sciences, Beijing, P.R. China

 $\mathbf{Sep.}\ \ \mathbf{2011}-\mathbf{Present}$

(Institute of Software Chinese Academy of Sciences) Master of Science, Computer Applied Technology

Xidian University, Xi'an, P.R. China

Sep. 2007 – Jul. 2011

Bachelor of Engineering, Software Engineering

Dissertation: Merging Domain-Specific Web Search Interfaces of the Deep Web

PUBLICATIONS

- Zhang, Z., et al. Hierarchical Cursor: Pointing on Large Displays using Smartphones. In preparation.
- Zhang, Z., Zhang, F., Chen, H., Liu, J., Wang, H. and Dai, G. Left and Right Hand Distinction for Multi-Touch Tabletop Interactions. *Proc. IUI 2014*, Pages 47-56.
- Liu, J., Zhang, F., **Zhang, Z.**, Chen, H., Dai, G., and Wang, H. Left-Right Hand Distinction System for Multi-Touch Tabletop. *Journal of Software*, 2014, 25(5), Pages 939-952.
- Li, Y., Wang, Y., Jiang, P., Zhang, Z. Multi-objective optimization integration of query interfaces for the Deep Web based on attribute constraints. Data & Knowledge Engineering, Volume 86, July 2013, Pages 38-60.
- Li, Y., Wang, Y., Yang, X., **Zhang, Z.**, Zheng, Y., and Zheng, L. NMLCS: A Novel Parallel Algorithm for Searching for the Multiple Longest Common Subsequences. *Energy Procedia*, Volume 11, 2011, Pages 1392-1404.

SELECTED PROFESSIONAL EXPERIENCE

Markerless Real Time Camera Tracking System

Dec. 2012 - Present

Designer and Developer

- Dissertation research on implementing a SLAM/PTAM system.
- Using camera images only to estimate the pose and position of a moving camera in an unknown environment in real time.

Large Display Based Interactive System $Main\ Developer$

May 2013 - Aug. 2013

- Collecting sensor information from smart devices (phones/pads), and estimating the devices poses to interact with a large display.
- Users can view the 3D world in 3 modes (driving, track ball, flight), pick and modify (scale/rotate/translate) objects.
- Several users can simultaneously interact with different objects on the same large display.

Left and Right Hand Distinction System for Multi-Touch Tabletop $Designer\ and\ Developer$

Oct. 2012 - Nov. 2012

- Analyzing the interactive video using OpenCV and figuring out the relationships between the fingers.
- Proposed a heuristic method to distinguish left hand from right hand.

Honors and Awards

• National Scholarship, University of Chinese Academy of Sciences

2%, 2013

• Merit Student, University of Chinese Academy of Sciences

15%, 2012 & 2013

- Privilege to enter the Graduate Program of Institute of Software Chinese Academy of Sciences, waived of Entrance Test
- Excellent Student Cadre, Xidian University

1%, 2009 & 2011

• Merit Student, Xidian University

3%, 2008 & 2010

• The First Class Scholarship for Academic Achivement, Xidian University

3%, 2008 & 2010

• National Scholarship for Encouragement, Xidian University

3%, 2009

EXTRACURRICULAR ACTIVITIES

• Member of Open Source Club of University of Chinese Academy of Sciences

2011 - Present

- The network administrator of Intelligence Engineering Lab, Institute of Software, Chinese Academy of Sciences

 2012 - 2013
- The Minister of Propaganda Department of the Student Union of the Department of Computer and Information Science and Engineering, University of Chinese Academy of Sciences
 2011 - 2012
- The Minister of Propaganda Department of the Student Union of the Department of Freshmen, Xidian University
 2007 - 2008

COMPUTER SKILLS AND OTHER PROFICIENCIES

- Programming: C/C++, Java, Matlab, Python, SQL.
- Libraries: OpenCV, OpenSceneGraph, OpenGL, boost.
- Platform: Windows 7/XP, LINUX, Android.
- Others: Network Programming, Parallel programming, LATEX.