ZHENSONG ZHANG

RM 701, BULD 5, 4# South Fourth Street, Zhongguancun, Beijing, P. R. China, 100190

mobile: (86) 18810460107 • email: zhensongzhang@gmail.com

EDUCATION

University of Chinese Academy of Sciences, *Beijing*, P.R. China — **Sep. 2011 − 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 — **May 2013 - Aug. 2013**
Main Developer
- 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 — **Oct. 2012 - Nov. 2012**
Designer and Developer
- 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

- **SIGAI IUI 2014 Travel Grants**, ACM — **2014**
- **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 — **2011**
- **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.