Wenbin Li

Max Planck Institute for Informatics
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RESEARCH INTEREST

Computer Vision: material recognition, object recognition, activity recognition
Robotics: perception and manipulation
Machine Learning: deep learning, transfer learning and reinforcement learning

EDUCATION

PhD, Computer Vision & Robotics 2013-2018
Saarland University & Max Planck Institute for Informatics, Germany
Thesis Title: From Perception over Anticipation to Manipulation

Master of Science, Computer Science 2010-2013
Saarland University, Germany
Thesis Title: Multi-scale Feature Learning for Material Recognition

Bachelor of Science, Science and Technology of Intelligence 2006-2010
Beijing University of Posts and Telecommunications, China
Specialization: Statistical Natural Language Processing

COMPUTER SKILLS

Python, Matlab, R, Perl, Bash, C/C++,
Java&Android, Objective C&iOS,
OpenCV, PCL, ROS, Theano, Caffe

LANGUAGES

Chinese (native), English (fluent), German (basic), Japanese (basic)

PROFESSIONAL EXPERIENCE

Data Mining Engineer, Jun, 2010- July, 2010
Funshion, Beijing, China

ACADEMIC EXPERIENCE

Teaching Assistant Oct, 2014- Feb, 2015
Machine Learning, Saarland University, Germany

Research Assistant Mar, 2012- Feb, 2013
Computer Vision and Multimodal Computing Department, Max Planck Institute for Informatics, Germany
Research Topic: Unsupervised feature learning for material recognition

Research Assistant Nov, 2011- Mar, 2012
Computer Graphics Department, Max Planck Institute for Informatics, Germany
Research Topic: Text entry

Research Assistant Mar, 2011- Nov, 2011
Computer Vision and Multimodal Computing Department, Max Planck Institute for Informatics, Germany
Research Topic: Material recognition

PUBLICATION

[1] Wenbin Li, Jeannette Bohg and Mario Fritz.*Acquiring Target Stacking Skills by Goal-Parameterized Deep Reinforcement Learning.*
Technical Report, 2017. (arXiv:1711.00267)

[2] Wenbin Li, Aleš Leonardis and Mario Fritz. *Visual Stability Prediction for Robotic Manipulation.*
IEEE International Conference on Robotics and Automation (ICRA), 2017.

[3] Wenbin Li, Aleš Leonardis and Mario Fritz. *Visual Stability Prediction and Its Application to Manipulation.*
Advances in Neural Information Processing Systems (NIPS) Workshop on Intuitive Physics. 2016. (Extended Abstract);
AAAI Spring Symposium Series: Interactive Multi-Sensory Object Perception for Embodied Agents, 2017. (Extended Abstract)
Technical Report, 2016. (arXiv:1609.04861, full Version)

[4] Wenbin Li, Seyedmajid Azimi, Aleš Leonardis and Mario Fritz. *To Fall Or Not To Fall: A Visual Approach to Physical Stability Prediction.*
Technical Report, 2016. (arXiv:1604.00066. 2016)

[5] Wenbin Li and Mario Fritz. *Recognition of Ongoing Complex Activities by Sequence Prediction over a Hierarchical Label Space.*
In IEEE Winter Conference on Applications of Computer Vision (WACV) 2016.

[6] Wenbin Li and Mario Fritz. *Teaching Robots the Use of Human Tools from Demonstration with Non-Dexterous End-Effectors.*
In IEEE RAS International Conference on Humanoid Robots (HUMANOIDS) 2015.

[7] Wenbin Li. *Learning Multi-scale Representations for Material Classification.*
Pattern Recognition. Springer International Publishing, 2014. 757-764.

[8] Antti Oulasvirta, Anna Reichel, Wenbin Li, Yan Zhang, Myroslav Bachynskyi, Keith Vertanen, and Per Ola Kristensson. *Improving two-thumb text entry on touchscreen devices.*
In SIGCHI Conference on Human Factors in Computing Systems (CHI) 2013.

[9] Wenbin Li and Mario Fritz. *Recognizing materials from virtual examples*
In European Conference on Computer Vision (ECCV) 2012.

AWARDS

Scholarship, International Max Planck Research School for Computer Science 2013-2015

Scholarship, Saarbrücken Graduate School of Computer Science, Saarland University 2010-2012

Scholarship for excellence in academic performance, Beijing University of Posts and Telecommunications 2007-2009

First prize and most creative award for customized Firefox web browser designing competition (among 11 teams from top universities in China) 2008