Zehuan Yuan

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EDUCATION BACKGROUND

Nanjing University, Nanjing, China   *Ph.D. 2014.09 - now*
Department of Computer Science and Technology

   * Supervisor: Prof. Tong Lu

Nanjing University, Nanjing, China   *M.S. 2012.09 - 2014.06*
Department of Computer Science and Technology

   * Supervisor: Prof. Tong Lu

Nanjing University, Nanjing, China   *B.S. 2008.09 - 2012.06*
Department of Computer Science and Technology

   * Overall GPA: 4.36/5   Major GPA: 4.45/5   Rank: 19/160

RESEARCH INTERESTS

Computer Vision: Unsupervised vision problems including large-scale object co-segmentation and category discovery; high-level vision problems such as semantic scene understanding and story-telling of images and videos.

Machine Learning: Structure learning and optimization methods, especially on scalable optimization and efficient inference for higher-order models.

RESEARCH EXPERIENCE

State Key Lab for Novel Software Tech. of Nanjing University   *2012.09 - now*
   * Postgraduate mentored by Prof. Tong Lu.
   * We focus on how to improve unsupervised category discovery using context constraints and attempt to address large-scale object co-segmentation.

Undergraduate Innovation Project of the Ministry of Education, China   *2010.12 - 2011.12*
   * Team leader of the project advised by Prof. Tong Lu.
   * We propose an incremental 3D reconstruction framework to refine an existing 3D model using online images of the same object.

PUBLICATIONS

Journal papers

[J01]. Palaiahnakote Shivakumara, **Zehuan Yuan**, Danni Zhao, Tong Lu, and Chew Lim Tan. New Gradient-Spatial-Structural Features for Video Script Identification. *Computer Vision and Image Understanding* (*CVIU*), 34(6): 559-564, 2014.

[J02]. **Zehuan Yuan**, and Tong Lu. Incremental 3D Reconstruction Using Bayesian Learning. *Applied Intelligence*, 39(4): 761-771, 2013.

Conference papers

[C01]. **Zehuan Yuan**, Tong Lu, and Palaiahnakote Shivakumara. A Novel Topic-level Random Walk Framework for Scene Image Co-Segmentation. *European Conference on Computer Vision* (*ECCV*). pp.695-709, 2014.

[C02]. **Zehuan Yuan**, and Tong Lu. A Novel Context-Aware Topic Model for Category Discovery in Natural Scenes. *Asian Conference on Computer Vision* (*ACCV*). 2014.

[C03]. **Zehuan Yuan**, Tong Lu, Haoyi Zhou, Chen Bin, and Jianing Li. Incremental 3D Reconstruction Using Bayesian Learning. *International Conference on Industrial, Engineering & Other Applications of Applied Intelligent Systems* (*IEA/AIE*). pp.754-763, 2012. **(Best Paper Award)**

PATENT

Zehuan Yuan, and Tong Lu. An Incremental 3D Reconstruction Method Based on PMVS and Bayesian Model. ZL201110411429.6. (**National Invention Patent, China**)

CONTEST

National Graduate Contest on Smart-City Technology and Design *2014*

* Project: We propose an new concept to design a scalable and intelligent building management system.
* Team member: Qisu Li, **Zehuan Yuan**, Yirui Wu, and Guozhu Liang.
* Grade: National Second Prize.

"Colledge Cup" of Chinese College Students of Academic Science and Technology *2012*

* Project: We design an intelligent building system platform on which many applications of diverse function can be designed and programmed easily.
* Team member: Run Xing, Zhi Qu, **Zehuan Yuan**, Wenliang Dai, Yu Yin, Xuanjun Dong, Runhua Chen, and Zhun Shi.
* Grade: National Bronze Prize and Golden Prize at Jiangsu Province.
* Remark: It is the highest level contest for graduate and undergraduate students in China.

INTERNATIONAL EXCHANGE

An one-month short visit to National University of Singapore. *2012*

HONORS & AWARDS

<u>Honors</u>

* Outstanding Student Leader of Nanjing University. *2014*
* Outstanding Student of Nanjing University. *2013*
* Best 100 Excellent College Students of China Computer Federation (CCF). *2012*
* Outstanding Graduate of Nanjing University. *2012*
* Outstanding Student of Nanjing University. *2011*

<u>Awards</u>

* Selected into the Talent Project of Nanjing University. *2014*
* Second Prize in National Intelligent City Contest for Graduate Students in China. *2014*
* Graduate National Scholarship. *2013*
* Best Paper Award by ISAI (International Society of Applied Intelligence) in IEA/AIE. *2012*
* National Bronze Prize in the Eighth "Colledge Cup" of Chinese College Students. *2012*
* Golden Prize in the Seventh "Colledge Cup" of College Students at Jiangsu Province. *2012*
* Excellent Thesis for Bachelor's Degree of Nanjing University. *2012*
* Excellent Undergraduate Innovation Project of Nanjing University. *2012*
* National Motivational Scholarship. *2012*
* National Motivational Scholarship. *2011*
* National Motivational Scholarship. *2010*