

Yi Wang

Curriculum Vitae

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Education

- 2005.09-2009.06 College of Computer Science and Technology, Jilin University, China, **Ph.D.**
- 2002.09-2005.03 College of Computer Science and Technology, Jilin University, China, **Master.**
- 1998.09-2002.06 College of Computer Science and Technology, Jilin University, China, **Bachelor.**

Professional Experience

- 2009.10-Now Master Tutor
- 2009.09-Now Lecturer
- 2009.07-Now Digital Media Technology Department, Software School, Dalian University of Technology, P.R.China

Teaching Courses

- 2010-Now C Programming Base and Application
- 2010-Now Virtual Reality and Application
- 2009-Now Computer Vision
- 2009-2015 Image Processing

Current Research Interests

Machine Learning (Zero-shot Learning, Incremental Learning and Manifold Learning) with its applications in human-computer Interaction.

Virtual Reality (Collision Detection and Seamless Composition)

Image Processing (Haze Filtering and Removal)

Publications (in the past five years)

- [1] **Yi Wang**, Panpan Shui, Xin Fan, Tianzhu Wang, "**Incremental null Foley-Sammon Transform [J]**", *Electronics Letters*, 2016 (On line) (SCI IF: 1.068).
- [2] **Yi Wang**, Tianzhu Wang, Xin fan, "**Fast Incremental Null Space based Linear Discriminant Analysis based on QR decomposition [J]**", *Pattern Recognition Letters*, 2016 (under review).

- [3] Xin Fan, **Yi Wang**, Renjie Gao, and Zhongxuan Luo, "**Haze filtering with natural transmission** [J]", *The Visual Computer*, January 2016, 32(1):137-147 (SCI IF: 1.073).
- [4] Chi Lin, Zihao Song, Houbin Song, **Yi Wang**, Guowei wu, "**Differential Privacy Preserving in Big Data Analytics for Connected Health**" *Journal of Medical Systems*,2016, 40(4):1-9.
- [5] **Yi Wang**, Juncheng Liu, Xin Fan, Xiangjian He, Qi Jia, and Renjie Gao, "**Online Gesture-based Interaction with Visual Oriental Characters based on Manifold Learning** [J]", *Signal Processing*, 110: 123-131, 2015. (SCI IF: 2.238)
- [6] **Yi Wang**, Xinli Jiang, Rongyu Cao and Xiyang Wang, "**Robust Indoor Human Activity Recognition Using Wireless Signals** [J]", *Sensors*, 2015, 15(7), 17195-17208. (SCI IF:2.245)
- [7] Renjie Gao, **Yi Wang**, Min Liu and Xin Fan, "**A fast algorithm for Dark Channel Prior** [J]", *Electronics Letters*, 2015, 50(24):1826-1828.(SCI IF: 1.068).
- [8] Sheng Wang, Qiang Wu, Xiangjian He, Jie Yang, **Yi Wang**, "**Local N-ary Pattern and Its Extension for Texture Classification** [J]", *Circuits and Systems for Video Technology, IEEE Transactions on*, Volume: PP, Issue: 99 , 2015, 2. (SCI IF: 2.259).
- [9] Qi Jia, Xinkai Gao, He Guo, Zhongxuan Luo and **Yi Wang**, "**Multi-Layer Sparse Representation for Weighted LBP-Patches Based Facial Expression Recognition** [J]", *Sensors* 2015, 15(3), 6719-6739. (SCI IF: 2.245)
- [10] **Yi Wang**, Zhongxuan Luo, Juncheng Liu, Xin Fan, Haojie Li, and Yunzhen Wu, "**Real-time Estimation of Hand Gestures based on Manifold Learning from Monocular Videos** [J]", *Multimedia Tools and Applications*, 71(2): 555-574, 2014. (SCI IF: 1.014)
- [11] Muhammad Abul Hasan, Min Xu, Xiangjian He, **Yi Wang**, "**A camera motion histogram descriptor for video shot classification** [J]", *Multimedia Tools and Applications*, August 2014 ,pp1-26 .(SCI IF: 1.014)
- [12] Li H, Yi L, Liu B, **Yi Wang**, "**Localizing relevant frames in web videos using topic model and relevance filtering** [J]". *Machine Vision and Applications*, 2013: 1-10. (SCI IF: 1.444)
- [13] Haojie Li, JinhuiTang, **Yi Wang**, Bin Liu, "**Looking into the world on Google Maps with view direction estimated photos** [J]", *Neurocomputing*, Volume 95, October, pp.72-77. 2012. (SCI IF: 2.005)
- [14] Li Wenhui, Wang Ying, **Yi Wang**, "**Eye location via a novel integral projection function and radial symmetry transform** [J]", *International Journal of Digital Content Technology and its Applications*, 5(8), pp.70-80, 2011.
- [15] **Yi Wang**, Wenhui Li, Yi Li, Zihou Ge, "**Dynamic clothing collision resolution using PSO** [J]", *International Journal of Computer Applications in Technology (IJCAT)*,38(1):2-9, 2010.
- [16] Wenhui Li, **Yi Wang**, Yi Li, Jiang Qi, "**Proximity Queries using Separating Bounding Volumes** [J]", *International Journal of Computer Applications in Technology(IJCAT)*,38(1),40-48, 2010.

Conference Papers

- [1] Xin Fan, Renjie Gao, and **Yi Wang**, "**Example-based Haze Removal with two-layer Gaussian Process Regressions**", *International Conference on Pacific Graphics*, 2014. Oral presentation;

- [2] Chai Z, Feng Y, Fan X, **Wang Y** et al. "**Efficient mesh-based face beautifier on mobile devices** [C]", Proceedings of the Fifth International Conference on Internet Multimedia Computing and Service. ACM, 2013: 169-173.
- [3] **Yi Wang**, Haojie Li, Juncheng Liu, Xin Fan, Yunzhen Wu, "**Real-Time Estimation of Hands Gestures from Monocular Video** [C]", Proceedings of the Fourth International Conference on Digital Home (ICDH2012), Guangzhou, China, 2012, pp.320-325, Oral presentation (EI-Compendex, ISTP)
- [4] **Yi Wang**, Fan Xin, Li Haojie, JiaQi. "**A hybrid visual attention method based on Itti model** [C]", Proceedings of Workshop on Digital Media and Digital Content Management, DMDCM 2011,5,15-17, Hangzhou, Zhejiang China, 2011, Oral presentation;

Patents

- [1] **Yi Wang**, Xin Fan, Haojie Li, Zhongxuan Luo. "**An interactive input and recognition method for Chinese characters based on hand gestures**" has already obtained the authorization of the national invention patent grant of China P.R. under ZL 2013 1 0012582.0
- [2] Xin Fan, **Yi Wang**, "**A method to generate color fog effect based on human interaction**". has already obtained the authorization of the national invention patent grant of China P.R. under ZL 2013 1 0013850.8
- [3] Qi Jia, He Guo, Fengqi Li, **Yi Wang**, Yu Liu. "**A matching method based on measurement information**", has already obtained the authorization of the national invention patent grant of China P.R. under ZL 2013 1 0011263.8
- [4] Xin Fan, Renjie Gao, **Yi Wang**, Liu Min. "**A fast filtering method based on image local minimum or maximum**". The patent application number: 201310429544.5.
- [5] Xin Fan, Renjie Gao, **Yi Wang**. "**A fog effect simulation method based on depth information**". The patent application number: 201310429999.4

Projects

Hosted Projects

Project: "**Inference of new behaviors of human body based on the hidden attribute learning method and semantic motion model**" supported by The National Natural Science Foundation of China (Grant No. 61402072), Jan. 2015-Dec.2017.

Project: "**Research on the key problems of real-time natural interaction in Augmented Reality**" supported by the Specialized Research Fund for the Doctoral Program of Higher Education of China (Grant No.20120041120050), Jan.2013-Dec.2015.

Project: "**Research on real-time hand natural interaction technology in Augmented Reality**" supported by Liaoning Province Education Administration (Doctor Startup Fund). Jan. 2012-Dec. 2013.

Project: "**Research on collision detection in Virtual Reality**" supported by the Fundamental Research Funds for the Central Universities of China, Jan.2009- Dec.2011.

Involved Projects

Project: "**Interactive understanding between people and complex environment based on social media perception**" supported by the Joint Research Fund for Overseas Natural Science of China. Jan. 2015-Dec. 2016

Project: "**Research on complex shape description and abstract characteristics based on internal constraints of 3D/2D models**" supported by The National Natural Science Foundation of China. Jan. 2015- Dec.2017

Project: "**3D digital content intelligent processing based on conformal geometry and geometric invariants**" supported by the Joint Research Fund for Overseas Natural Science of China. Jan. 2014- Dec.2015

Honors

- 2015 The outstanding graduate graduation thesis guidance teacher of Dalian University of Technology in 2015
- 2015 The outstanding undergraduate graduation thesis guidance teacher of Dalian University of Technology in 2015
- 2015 Teaching Quality Excellence Awards of Dalian University of Technology
- 2013 Teaching Quality Excellence Awards of Dalian University of Technology
- 2013 The outstanding undergraduate graduation thesis guidance teacher of Dalian University of Technology in 2013
- 2012 Teaching Quality Excellence Awards of Dalian University of Technology

Professional Activities

- 2015 Program Committee member, The 21th International Packet Video Workshop in conjunction with PCS 2015, May, 2015, Cairns, Australia
- 2015-present CCF Dalian Branch Committee Member
- 2014-present Reviewer for Multimedia Tools and Applications
- 2013 Session co-chair, "Human-Computer Interaction" , the 4th International Conference on Digital Home, Nov. 2013, Guangzhou, China.
- 2013-present Reviewer for International Conference on Digital Home(ICDH)
- 2013-present Reviewer for Pacific-Rim Conference on Multimedia (PCM)
- 2012-present CCF member
- 2012-present ACM member
- 2009-present IEEE member