Lin Chen

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EDUCATION

	2011.8-present	Department of Computer Science and Engineering, Arizona	Ph.D.
		State university, U.S. [GPA 3.81/4.00]	
:	2008.9-2011.6	Department of Computer Science and Technology, Shandong	M.S.
		University, China	
	2004.9-2008.6	Department of Computer Science and Technology, Shandong	B.S.
		University, China	

PROFESSIONAL EXPERIENCE

Visual Representation and Processing Group, Arizona State University, 2011.8present

Work on computer vision and machine learning related projects under the advisory of Prof. Baoxin Li

- Computational approaches for automatic understanding of motion skills in surgical simulations;
- Attribute prediction and scene understanding through multi-task learning;
- Image retrieval/ranking through attributes learning;
- Multi-class feature selection through sparse learning and clustering.
- Research Intern at Nokia-Tech, 2015.5-2015.8

Work on 360-degree panorama media processing

- > Developed a prototype system for view recommendation in panorama images/videos;
- > Filed two invention reports (patents on pending).
- HCI & VR Research Lab, Shandong University, 2009.9-2011.6

Work on designing and developing a new 3D rendering engine under the advisory of Prof. Xiangxu Meng

- > Developing a file parser which can parse popular 3D model files and generate a data structure for post-processing;
- Developing modules for texture generation and texture mapping.
- Graphics & Geometric Computing Group, Tsinghua University, 2008.9-2009.6
 Work as research student on Intelligent processing of visual media under the advisory of Prof. Shimin Hu
 - > Geometric texture transfer and preservation during model deformation.

PUBLICATIONS

- [1] **Lin Chen** and Baoxin Li, "Fusing Pointwise and Pairwise Labels for Supporting Personalized Image Retrieval", ACM International Conference on Multimedia Retrieval (ICMR), June 2015.
- [2] **Lin Chen**, Qiang Zhang, Peng Zhang and Baoxin Li, "Instructive Video Retrieval For Surgical Skill Coaching Using Attribute Learning", IEEE International Conference on Multimedia and Expo (ICME), June 2015.
- [3] **Lin Chen**, Peng Zhang and Baoxin Li, "Instructive Video Retrieval Based on Hybrid Ranking and Attribute Learning", ACM Multimedia (MM), November 2014.
- [4] Qiang Zhang, **Lin Chen** and Baoxin Li, "Max-margin Multi-attribute Learning with Low-rank Constraint", IEEE Transactions on Image Processing, Vol. 23, 2014.
- [5] Lin Chen, Qiang Zhang and Baoxin Li, "Predicting Attributes via Relative Multi-task

- Learning", Computer Vision and Pattern Recognition (CVPR), 2014 IEEE Conference on, June, 2014.
- [6] Lin Chen, Qiang Zhang, Qiongjie Tian and Baoxin Li, "Learning Skill-Defining Latent Space in Video-Based Analysis of Surgical Expertise – A Multi-Stream Fusion Approach", NextMed / MMVR 2013 (Medicine Meets Virtual Reality) 2013.
- [7] Qiongjie Tian*, Lin Chen*, Qiang Zhang and Baoxin Li, "Enhancing Fundamentals of Laparoscopic Surgery Trainer Box via Designing A Multi-Sensor Feedback System", NextMed / MMVR 2013 (Medicine Meets Virtual Reality) 2013. (* Equally contributed)
- [8] Qiang Zhang, **Lin Chen**, Qiongjie Tian and Baoxin Li, "Video-based analysis of motion skills in simulation-based surgical training", IS&T/SPIE Electronic Imaging, 2013.
- [9] **Lin Chen** and Xiangxu Meng, "Anisotropic Resizing and Deformation Preserving Geometric Texture", Science in China Series F-Information Sciences Information Sciences. December 2010 Vol. 53 No. 12: 2441–2451.
- [10] **Lin Chen** and Xiangxu Meng, "Anisotropic Resizing of Model with Geometric Textures", 2009 SIAM/ACM Joint Conference on Geometric and Physical Modeling.

CERTIFICATION

- IBM eServer Certified Specialist pSeries Administration and Support for AIX 5L v5.2. Aug. 3, 2005. IBM CERT F1509099 3.
- IBM Certified Solution Developer XML and Related Technologies. Dec. 10, 2005. IBM CERT F1530617 20.

PATENTS

 M13-086P: Video-based system for improving surgical training by providing corrective feedback on a trainee's movement

SELECTED AWARDS

- University Graduate Fellowship, 2015.
- Student Travel Award of ACMMM, 2014.
- IBM Chinese Excellent Student Scholarship, 2010.
- Outstanding students of Shandong Province, 2008.
- MCM(The Mathematical Contest in Modeling)/ICM(The Interdisciplinary Contest in Modeling), Honorable mention, 2007.
- Chinese national scholarship for outstanding students, 2007.
- HP Scholarship for Outstanding Chinese Students, 2007.
- Chinese Undergraduate Mathematical Contest in Modeling (CUMCM), National second prize, 2006.

OTHER ACADEMIC ACTIVITIES

- Teaching Assistant of CSE 310: Data Structure and Algorithm, Arizona State University, Spring 2014.
- Teaching Assistant of Computer Graphics for Undergraduates, Shandong University, Spring 2009.
- Student Volunteer for CVPR 2014 and ACM MM 2011.