

## Lin Chen

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### OBJECTIVE

Research scientist or engineering position in computer vision & graphics, applied machine learning or data mining.

### RESEARCH INTERESTS

- Applied Machine Learning: Transfer learning, especially Multi-task learning; Multi-view learning; Sparse learning; Object ranking.
- Data Mining: Feature selection; Information retrieval.
- Computer Vision & Graphics: Action recognition; Image understanding; Motion analysis; Geometric processing; Aesthetic Images.

### EDUCATION

Ph.D., Computer Science	Arizona State University, Tempe, AZ	August 2011 – April 2016 (Expected)
M.S., Computer Science	Shandong University, China	September 2008 – June 2011
B.S., Computer Science	Shandong University, China	September 2004 – June 2008

### PROFESSIONAL EXPERIENCE

Nokia Technologies, Sunnyvale, CA	May 2015 – August 2015
Digital Media Group	Research Intern
<ul style="list-style-type: none"><li>• Aesthetic image recommendation for 360-degree panorama images.</li></ul>	

Arizona State University, Tempe, AZ	August 2011 – Present
Visual Representation and Processing Group	Research Assistant
<ul style="list-style-type: none"><li>• Action recognition based on vector representation;</li><li>• Image classification/ranking based on semantic attributes;</li><li>• Multi-class feature selection through sparse learning and clustering;</li><li>• Computational approaches for automatic understanding of motion skills in surgical simulations.</li></ul>	

Shandong University, China	September 2009 – June 2011
HCI & VR Research Lab	Research Assistant
<ul style="list-style-type: none"><li>• Image texture generation and Synthesis;</li><li>• Parallel animation image rendering system.</li></ul>	

Tsinghua University, China	June 2008 – June 2009
Graphics and Geometric Computing Group	Visiting Researcher
<ul style="list-style-type: none"><li>• Geometric texture transfer and preservation during model deformation.</li></ul>	

### PUBLICATIONS

#### Conferences

- Lin Chen and Baoxin Li, “Fusing Pointwise and Pairwise Labels for Supporting Personalized Image Retrieval”, ACM International Conference on Multimedia Retrieval (ICMR), June 2015.

- 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.
- Lin Chen, Peng Zhang and Baoxin Li, “Instructive Video Retrieval Based on Hybrid Ranking and Attribute Learning”, ACM Multimedia (MM), November 2014.
- 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.
- 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.
- 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)
- 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.
- Lin Chen and Xiangxu Meng, “Anisotropic Resizing of Model with Geometric Textures”, 2009 SIAM/ACM Joint Conference on Geometric and Physical Modeling.

## Journals

- Lin Chen, Peng Zhang and Baoxin Li, “User-adaptive Image Retrieval via Fusing Pointwise and Pairwise Labels”, International Journal of Multimedia Information Retrieval (MMIR), Dec. 2015.
- Qiang Zhang, Lin Chen and Baoxin Li, “Max-margin Multi-attribute Learning with Low-rank Constraint”, IEEE Transactions on Image Processing, Vol. 23, 2014.
- 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: 24412451.

## 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

- Method and Apparatus for Identifying Salient Subimages within a Panoramic Image. (on filing)
- M13-086P: Video-based system for improving surgical training by providing corrective feedback on a trainees 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.

## **ACADEMIC SERVICES**

- Teaching Assistant: CSE 310 Data Structure and Algorithm, CSE 591 Fundation of Algorithm, Arizona State University; Computer Graphics, Shandong University;
- Student Volunteer: CVPR 2014 and ACM MM 2011;
- External Reviewer: CVPR, ICCV, CIKM, IJCAI.