

Lin Zhong

13 Flower Rd
Somerset, New Jersey,
08873

Tel: (267) 815-5411
Email: linzhongz1@gmail.com
Homepage: paul.rutgers.edu/~linzhong

Education

- **Rutgers University**, New Brunswick, NJ, 09/2009 - 02/2015
Ph.D. candidate in Computer Science (GPA 4.00/4.00)
Advisor: Dimitris N. Metaxas
- **Beihang University**, Beijing, China, 2006 - 2009
M.S., Computer Science and Engineering
- **Harbin Engineering University**, Harbin, China, 2002 - 2006
B.E., Computer Science and Engineering (Major GPA 3.80/4.00)

Technical Skills

- **Programming** C, C++, Java, Matlab, SQL, JSP, HTML
- **Tools** OpenCV, MS Visual Studio C++, MySQL
- **Communication** Team leader of lab projects; Teaching Assistant for 100 undergraduate students

Research Interests

- Machine Learning, Computer Vision, Image Processing

Working Experience

- **Software Engineer Intern**, Facebook, Menlo Park, CA, 06/2014 - 08/2014
- **Research Intern**, Adobe Creative Technologies Labs., Seattle, WA, 06/2012 - 08/2012
- **Research Intern**, Eastman KODAK Research Labs., Rochester, NY, 06/2011 - 08/2011
- **Research Assistant**, Rutgers University, New Brunswick, NJ, 07/2010 - 06/2014
- **Teaching Assistant**, Rutgers University, New Brunswick, NJ, 09/2009 - 06/2010

Projects

- **Facebook Inc., Menlo Park, CA**
Advisor: Dan Zhang
 - **Feature Engineering for Ads Ranking / Boosting Tree Selection**
 - * Retrieved Asx features from Adlogger for conversion prediction.
 - * Added offline features and breakdowns (e.g., age, gender) for newly introduced video ads.
 - * Boosting trees were trained first, and the trees were selected greedily for logistic regression.
- **Adobe Creative Technologies Labs., Seattle, WA**
Advisors: Jue Wang, Sunghyun Cho, Sylvain Paris
 - **Handling Noise in Image Deblurring using Directional Filters**. In [CVPR'2013, Oral]
 - * Proposed a method to restore the sharp latent image from a noisy and blurry input image.
 - * Directional filters were used to keep the partial blur information intact when denoising.
 - * Implemented a framework for single image deblurring with noisy and blurry image inputs.

- **Eastman KODAK Research Labs., Rochester, NY**
Advisors: Sen Wang, Rodney Miller
 - **Automatic Stereoscopic Video Synthesis from a Casual Monocular video.** In [ISM'2012]
 - * An automatic framework was proposed to convert casually captured 2D videos into 3D videos.
 - * Proposed a Bayesian-based view synthesis approach to synthesize high quality virtual views.
 - * Implemented a system with structure from motion, depth map estimation, view synthesis.
- **The Center for Computational Biomedicine Imaging and Modeling (CBIM), Rutgers**
Advisor: Dimitris N. Metaxas
 - **Papillary Muscles Analysis from High Resolution CT using Spatio-temporal Skeleton Extraction.** In [ISBI'2013]
 - * A two-stage coarse-to-fine registration is employed to build the 3D+time model meshes for papillary muscles from the high resolution CT image data.
 - * A spatio-temporal skeleton extraction method is proposed, and skeleton-based indices are used to characterize hypertrophic hearts.
 - **Learning Active Facial Patches for Expression Analysis.** In [CVPR'2012]
 - * Inspired by the observations that only a few facial appearance parts are active in expression disclosure and most of them are distributed around the areas of mouth, eyes, and eyebrows.
 - * Proposed A two-stage multi-task sparse learning framework to formulate the commonalities among expressions, and find out the locations of common and specific patches.
 - **Ranking Model Applications.** In [ACM MM'2011] and [ICPR'2010]
 - * **Facial Age Estimation.** Using ranking model to do feature selection on the haar-like features. The training pairwise samples are extracted from the sequence of each subject.
 - * **Image Retrieval.** Content quality based image retrieval with multiple instance boost ranking. The image content quality is disclosed by image patches with meaningful objects.

Selected Publications

- **Lin Zhong**, Qingshan Liu, Peng Yang, Junzhou Huang, and Dimitris Metaxas "Learning Multi-scale Active Facial Patches for Expression Analysis" *IEEE Transaction on Cybernetics*, 2014. *In press*.
- **Lin Zhong**, Minwoo Park, and Dimitris Metaxas "Automatic Stereoscopic Video Generation based on Virtual View Synthesis" *Neurocomputing*, 2014. *In press*.
- **Lin Zhong**, Sunghyun Cho, Jue Wang, Sylvain Paris and Dimitris Metaxas. "Handling Noise in Single Image Deblurring using Directional Filters". *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2013. *Oral presentation*.
- **Lin Zhong**, Shaoting Zhang, Mingchen Gao, Junzhou Huang, Zhen Qian, Dimitris Metaxas and Leon Axel. "Papillary Muscles Analysis from High Resolution CT using Spatial-Temporal Skeleton Extraction". *IEEE International Symposium on Biomedical Imaging (ISBI)*, 2013.
- **Lin Zhong**, Qingshan Liu, Peng Yang, Bo Liu, Junzhou Huang and Dimitris Metaxas. "Learning Active Facial Patches for Expression Analysis". *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2012.
- **Lin Zhong**, Sen Wang, Minwoo Park, Rodney Miller and Dimitris Metaxas. "Towards Automatic Stereoscopic Video Synthesis from a Casual Monocular Video". *IEEE International Symposium on Multimedia (ISM)*, 2012.
- **Lin Zhong**, Chao Li, Ling Xue and Zhang Xiong: An algorithm for shot clustering based on spectral division. *IEEE International Symposium on Visual Computing (ISVC)*, 2008.

Activities

- Chair of Public relationship department, Rutgers Chinese students and scholars Association. (2011)
- Vice president, Rutgers badminton club. (2012-2013)