

CURRICULUM VITAE

Xu Liu

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Education

2004~now, University of Maryland, College Park

Ph.D. Candidate in Computer Science (Master's degree obtained on May 2006)

2000~2004, Tsinghua University, Beijing, P.R.China

B. Eng in Computer Science, honored graduate of both Tsinghua Univ. & Beijing City, July 2004

Research Interest

•Pattern Recognition •Image Retrieval •Mobile Computing

Publication

A Camera-based Mobile Data Channel: Capacity and Analysis

Xu Liu, David Doermann, Huiping Li

to appear as oral presentation on ACM International Conference on Multimedia 2008

A Camera Phone Based Currency Reader for the Visually Impaired

Xu Liu, David Doermann

to appear on Tenth International ACM SIGACCESS Conference on Computers and Accessibility, 2008

Mobile Retriever: Access to Digital Documents from their Physical Source

Xu Liu, David Doermann

in press on International Journal of Document Analysis and Recognition

VCode – Pervasive Data Transfer Using Video Barcode

Xu Liu, David Doermann, Huiping Li

IEEE Transactions on Multimedia, vol. 10, no. 3, April 2008, pp. 361-371

Mobile Retriever – Search among 12K documents with a partial snapshot

Xu Liu, David Doermann

Second International Workshop on Camera-Based Document Analysis and Recognition, September, 2007

Imaging as an Alternative Data Channel for Camera Phones

Xu Liu, David Doermann, Huiping Li , best paper on

5th International Conference on Mobile and Ubiquitous Multimedia, December, 2006

Fast Camera Motion Estimation for Hand-held Devices and Applications

Xu Liu, David Doermann, Huiping Li

4th International Conference on Mobile and Ubiquitous Multimedia, December, 2005

Using Computer Vision to Detect Web Browser Display Errors

Xu Liu, David Doermann

3rd International Workshop on Web Document Analysis, Seoul, Korea, August, 2005

A Middleware Based Mobile Scientific Computing System—MobileLab

Xi Wang, Xu Liu, Xiaoge Wang, Yu Chen

The 3rd International Conference on Grid and Cooperative Computing (GCC2004), Wuhan, China, 2004

Generic Slow-motion Replay Detection in Sports Video (Jan, 2004)

Lei Wang, Xu Liu, Steve Lin, Guangyou Xu, Heung-Yeung Shum

IEEE International Conference on Image Processing (ICIP'04), Singapore, 2004

Image Orientation Detection with Integrated Human Perception Cues (December, 2002)

Lei Wang , Xu Liu, Lirong Xia, Guangyou Xu, Alfred Bruckstein

IEEE International Conference on Image Processing (ICIP'03), Barcelona , Spain , September, 2003

A Novel 2D Marker Design and Application in Object Tracking and Event Detection

Xu Liu, David Doermann, K. C. Lee

under review of International Symposium on Visual Computing 2008

Honors & Awards

2006	Best Paper award on 5 th International Conference on Mobile and Ubiquitous Multimedia (MUM06)
2004	Honored Undergraduate of both Tsinghua University and Beijing City
2004	Second Prize on national Mathematical Contest in Modeling
2004	"Computer World" Scholarship
2003	Third Prize on national Mathematical Contest in Modeling
2003	IBM outstanding students' Scholarship, First Prize
2002	National Scholarship for best students in China , First Prize (1 st of all B.E. students' awards in CS Dept. Tsinghua Univ.)
2001	Winner of the Artificial Intelligent Programming Contest of Tsinghua Univ. , First Prize
2001	Scholarship of best academic record, First Prize

Activities

Reviewer, IEEE Transactions on Neural Systems and Rehabilitation Engineering
Reviewer, International Journal of Document Analysis and Recognition (IJDAR)
Reviewer, International Conference on Mobile and Ubiquitous Multimedia 06,07
Reviewer, International Conference on Document Analysis and Recognition 05,07
Reviewer, International Workshop on Document Analysis Systems, 08

June ~ August 2005, 2006, 2007 intern at Applied Media Analysis Inc, kernel design of an OCR system; developed pattern recognition and camera motion estimation system on camera phones; invented VCode (patented, www.mobileama.com). Work also include proposal and report writing, cooperation with CACI, BBN and DoD.