

Minwoo, Park

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EDUCATION

The Pennsylvania State University, University Park, PA

Ph.D Candidate (ABD) in Computer Science and Engineering,

Expected graduation date: Spring 2010 GPA: 3.81/4.0

The Pennsylvania State University, University Park, PA

Master of Science in Electrical Engineering, Sep 2005 ~ Aug 2007 GPA: 3.87/4.0

Korea University, Seoul, South Korea

Bachelor of Engineering in Electrical and Computer Engineering, GPA: 3.54/4.5

PUBLICATIONS

***M. Park**, K. Brocklehurst, Robert T Collins and Y. Liu, “*Deformed Lattice Detection in Real-World Images Using Mean-Shift Belief Propagation*”, Pattern Analysis and Machine Intelligence, IEEE Transactions on, special issue on Probabilistic Graphical Models, volume 31 number 10, October 2009.

***M. Park** and S. Lee, *Face Modeling and Tracking with Gabor Wavelet Network Prior*, the 19th International Conference on Pattern Recognition (ICPR 2008).

***M. Park**, R. Collins and Y. Liu, *Deformed Lattice Discovery via Efficient Mean-shift Belief Propagation*, the 10th European Conference on Computer Vision (ECCV 2008).

***M. Park**, Y. Liu and R. Collins, *Efficient Mean-shift Belief Propagation for Vision tracking*, IEEE Computer Society Conference on Computer Vision and Pattern Recognition (CVPR 2008).

***M. Park**, S. Lee, P. Chen, S. Kashyap, A. Butt and Y. Liu, *Performance Evaluation of State-of-the-Art Discrete Symmetry Detection Algorithms*, IEEE Computer Society Conference on Computer Vision and Pattern Recognition (CVPR 2008).

P. Chen, J.H. Hays, S. Lee, ***M. Park**, and Y. Liu, *A Quantitative Evaluation of Symmetry Detection Algorithms*, Tech.report CMU-RI-TR-07-36, Robotics Institute, Carnegie Mellon University, Sep, 2007. Tech Report PSU-CSE-07011

J. Jung, H. Lee, E. Yang, J. Kim, J. Baek, ***M. Park**, and W. Choi, “*Distributed Parking Management System*”, Book chapter in Bit project no.53, ISBN: 8985957538 Edited and published by Bit company, Seoul Korea.

CONFERENCE DEMONSTRATION /PRESENTATION

***M. Park**, K. Brocklehurst, R. Collins, Y. Liu, “*Deformed Lattice Detection in Real-World Images Using a Novel Mean-Shift Belief*”, To be demonstrated at the 23rd Annual Conference on Neural Information Processing Systems (NIPS 2009)

Ruback, R. B., Collins, R., Ge, W., ***Park, M.**, and Koon-Magnin, S., *Development and validation of a computer vision method for identifying and tracking small groups*. Presented at the annual meeting of the Society for Personality and Social Psychology, Tampa (2009, February).

AWARD

The first place prize of 2008 Korean Computer Scientists and Engineers Association in America Moon Jung Chung Scholarship Poster Competition.

RELATED COURSES

Introduction to Computer Vision (A-), Advanced Computer Vision (A), Computational Symmetry (A-), Pattern Recognition (A-), Probability Theory (A), Vision Tracking (A), Visual Saliency (A), Human Behavior Analysis From Video (A), Numerical Analysis (A-), Numerical Optimization(A), Data Mining (A), Bioinformatics I (A)

RESEARCH EXPERIENCE

KODAK Research Laboratories

- Research internship

- Where is this photo taken and how ? (Summer 2009)
[Visual C++, MATLAB, OpenCV, PHP, Google API]

Laboratory of Perception, Action and Cognition, The Pennsylvania State University

- Research assistant

- Linear time order belief propagation for computer vision (Fall 2009 ~)
- Image De-layering using Online Learning of the Layer (Fall 2008 ~)
[Visual C++, MATLAB, OpenCV]
- Image Segmentation using Translational Symmetry (Fall 2008 ~)
[Visual C++, MATLAB, OpenCV]
- Lattice Discovery via Mean-shift Belief Propagation (Spring 2008 ~ Fall 2008)
[Visual C++, MATLAB, OpenCV]
- Crowd Analysis – pedestrian detection using SVM (Spring 2008)
[Visual C++, MATLAB, OpenCV, flash]
- Efficient Mean-shift Belief Propagation for Vision Tracking (Spring 2007~Summer 2007) [Visual C++, MATLAB, OpenCV]
- Detection of independent moving object using 3D reconstruction and optical flow (Spring 2006~Fall 2006) [Visual C++, MATLAB, OpenCV]

PERCEPTCOM Research and development center

- S/W Engineer

- Character Recognition for Patent application documents for Government of Korea (Nov 2002 ~ June 2003) [Visual C++, ATL COM]
- Bundle software for pen-type mouse Presentation aid software (Sep 2002 ~ July 2003) [Visual C++]
- Instant Message, chatting Server (Feb 2002 ~ August 2002)
[Visual C++, MS DB 2000]
- Software auto-updating module and its server (Feb 2001 ~ July 2001)
[Visual C++, MS DB 2000]
- Chinese, English, Korean Dictionary for embedded OS (Dec 2000 ~Feb 2001) [C]

- Computer remote access control module (Aug 2001 ~ Aug 2002) [Visual C++]
- Data mining tool for Chinese Dictionary (Nov 2000 ~ Dec 2000) [C, Visual C++]
- File transfer module (Oct 2000 ~ Aug 2001) [Visual C++, ATL COM]

Freelancer Feb 2000 ~ Sep 2000

- Server network traffic monitoring module (Aug 2000 ~ Sep 2000) [ASP, HTML]
- Online bookstore accountant module (June 2000 ~ Aug 2000) [ASP, HTML]

BIT academy Client and Server program team July 1999 ~ Feb 2000

- Distributed Parking Management System (Nov 1999 ~Feb 2000)
[Developed middleware server using telephone api, VC++, Oracle 8i DB]

TEACHING EXPERIENCE

Teaching Assistant for Pattern Recognition and Machine Learning,
The Pennsylvania State University, Fall 2009

SKILLS

Operating Systems: Windows, OSX, Linux

Software Design: C, VC++, QT, OpenCV, ATL COM, JAVA, ASP, HTML, MATLAB,
FLASH, PHP

Applications: MS Office, MS DB, Oracle DB, Photoshop.

ACTIVITIES

Penn State Univ. Korean Student Association. (Fall '05 ~ Spring '06, Spring '08 ~ Fall '08)
Leader of Korea University Christian Fellowship (Fall 1999 ~ Spring 2000)

REFERENCES

Prof. Yanxi Liu. School of Computer Science and Engineering
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Prof. Robert T. Collins School of Computer Science and Engineering
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Tel: (814) 863-1944, rcollins@cse.psu.edu

Prof. GilSoo Jang School of Electrical and Computer Engineering, Korea
University, Seoul
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***More available upon request.**