

VITA

Name: Sung-Young Jung

Affiliation: Ph.D. student, Intelligent Systems Program, University of Pittsburgh.

Tel: (office) 623-349-1141

E-mail: syjung5@asu.edu

chopin@cs.pitt.edu

homepage: <http://www.cs.pitt.edu/~chopin/>

Education and Work Experiences

1. Intelligent Systems Program (Ph.D.), University of Pittsburgh, 2008~2011 (will be completed in October)
2. Research Assistant in the School of Computing, Informatics, and Decision Systems Engineering, Arizona State University, 2008~2010
3. Intelligent Systems Program (Master), University of Pittsburgh, 2005~2008
4. Senior Researcher, Technology Research Center, Mobigen Inc., 2004~2005
5. Junior Researcher, Information Tech. Lab., LG Electronics Inst. of Technology, 1996~2002
6. Computer Science (Master), KAIST (Korea Advanced Institute of Science and Technology), 1994-1996
7. Computer Science (Bachelor), KAIST (Korea Advanced Institute of Science and Technology), 1990~1994

Awards and Activities:

1. BEST PAPER AWARD at 2nd International Symposium on Advanced Intelligent Systems, August 2001.
2. Session Chairman in ICDM 2001 (IEEE International Conference on Data Mining), December 2001.
3. EXCELLENT PAPER AWARD in LG Electronic Institute of Technology. January 2002.
4. Referee Reviewer in Journal of Electronic Imaging, 2004

Publication:

Thesis:

1. Sung-Young Jung, "[Using Natural Language as Knowledge Representation in an Intelligent Tutoring System](#)", Ph.D. Thesis, University of Pittsburgh, 2011 (to appear),

Journal Articles:

2. Sung Young Jung, Jeong-Hee Hong, Taek-Soo Kim, "[A Statistical Model for User Preference](#)", *IEEE Knowledge and Data Engineering*, June 2005 (Vol. 17, No. 6) pp. 834-843.
3. Sung Young Jung, "[A Topographical Development Method of Neural Networks for Artificial Brain Evolution](#)", *Artificial Life*, The MIT Press, vol. 11, issue 3 - summer, 2005, pp. 293-316.

4. SungYoung Jung, Taek-Soo Kim, "An Incremental Similarity Computation Method in Agglomerative Hierarchical Clustering", *Journal of Fuzzy Logic and Intelligent System*, December, 2001, (EXCELLENT PAPER AWARD in LG Institute of Technology 2002)
5. SungYoung Jung, et. al., "Part-Of-Speech Tagger Using Maximum Entropy Estimation Method Based Markov Random Field", *Korean Journal of Cognitive Science*, Vol. 7, NO. 2, 1996

Conference Papers:

6. Sung-Young Jung, and Kurt VanLehn, "Developing an Intelligent Tutoring System Using Natural Language for Knowledge Representation", *Tenth International Conference on Intelligent Tutoring Systems: Bridges to learning*, pp. 785-787, Pittsburgh, Pennsylvania, USA, 2010
7. Sung-Young Jung, "Using Natural Language to Represent Knowledge In an Intelligent Tutoring System", *The Fifth International Conference on Knowledge Capture*, pp. 191-192, Redondo Beach, California, USA, 2009
8. Sung-Young Jung, Kurt VanLehn, "Bi-directional Search for Bugs: A Tool for Accelerating Knowledge Acquisition for Equation-Based Tutoring Systems", *Intelligent Tutoring Systems (ITS 2008)*, pp. 758-762, Montreal, Canada, 2008
9. Sung-Young Jung, and Kurt VanLehn, "An Error Detection Method using Bidirectional Search to Locate Principles Causing Dead Ends in Pyrenees", *First Annual Inter-Science of Learning Center Student and Post-Doc Conference (iSLC)*, February 2008, Pittsburgh, PA.
10. Sung Young Jung, Jeong-Hee Hong, Taek-Soo Kim, "A Formal Model for User Preference", *IEEE International Conference on Data Mining (ICDM'02)*, Maebashi TERRSA, Maebashi City, Japan, December, 2002.
11. SungYoung Jung, Taek-Soo Kim, "An Agglomerative Hierarchical Clustering using Partial Maximum Array and Incremental Similarity Computation Method", *IEEE International Conference on Data Mining (ICDM'01)*, Doubletree Hotel, San Jose, California, USA, November 29, 2001
12. SungYoung Jung, Taek-Soo Kim, "An Incremental Similarity Computation Method in Agglomerative Hierarchical Clustering", *2nd International Symposium on Advanced Intelligent Systems*, Daejeon, Korea, August 25, 2001, (BEST PAPER AWARD)
13. SungYoung Jung, et. al., "An English-Korean Transliteration Model by Extending Markov Window", *18th International Conference on Computational Linguistics (COLING2000)*, Saarbrucken, Luxembourg, Nancy, 2000
14. SungYoung Jung, et. al., "Fast Agglomerative Hierarchical clustering using Partial Maximum Array, and Scalar calculation for Cluster similarity", *Korean Data Mining Conference*, 2000
15. SungYoung Jung, et. al., "MRF-based English Part-Of-Speech tagging system", *16th International Conference on Computational Linguistics (COLING96)*, Copenhagen, Denmark, 1996

Book:

16. Sung Young Jung, "The Self" (Korean), Booktopia (e-book publisher), 2003.

Patents (Korean)

1. SungYoung Jung, Taek-Soo Kim, "TV Program Recommendation Method Using Text Information", application id P02-022303, 2001
2. Jeon Hee Hong, Munho Jung, SungYoung Jung, Taek-Soo Kim, "TV Channel Skipper Applying User Preference.", application id P02-019027, 2001
3. Munho Jung, SungYoung Jung, Taek-Soo Kim, "The Editing Method for Virtual Channel in TV", registration id P0425689, 2004
4. Munho Jung, SungYoung Jung, Taek-Soo Kim, "The Automatical Channel Changing Method using Virtual Channel in TV", application id P01-088498, 2001
5. SungYoung Jung, Taek-Soo Kim, "Fast Clustering Using Scalar Computation Method", registration id 434372, 2004
6. SungYoung Jung, Taek-Soo Kim, "Hierarchical Clustering Using Partial maximum Array", registration id 434373, 2004
7. SungYoung Jung, Sung Lim Hong, "The English-Korean Transliteration Tagging Method", apply id P99-50572, 1999-11-15
8. SungYoung Jung, "The Learning Technique of Decision Tree", registration id P218471, 1999-06-10
9. Gyon, Jong Seo, SungYoung Jung, "Thesaurus Compiling Method", registered id P308011, 2001-08-27

Research and Development Experience

1. In Graduate School in University of Pittsburgh:
 - An Authoring system using natural language representation for an ITS (Natural-k) (Ph.D Thesis)
 - Programming in Natural Language (Natural-p)
 - Knowledge gap detection for an ITS (intelligent tutoring system) (Pyrenees)
 - User interface for an ITS with a wizard (Cordillera)
2. As a Research Assistant in Arizona State University:
 - Natural language user input modules for an Intelligent Tutoring system (Andes)
3. As a Senior Researcher in Technology Research Center, Mobigen Inc.
 - Natural language automatic answering system for product ordering and consulting.
4. As a Junior Researcher in LG Institute of Technology
 - Intelligent User Interface in Natural Language
 - Thesaurus Compiler
 - A Korean Part-Of-Speech Tagger using Hidden Markov Model
 - Inference Engine using Decision Tree
 - Feature Selection program
 - Information Retrieval Project
 - Automatic Document Classifier using k-NN

- English-to-Korean Transliteration model (published in COLING)
 - Webrobot
- Project on Personalization Systems
 - Collaborative Filtering Engine
 - Fast Clustering Algorithm for large and high dimensional data (published in IEEE ICDM)
 - Statistical model on user preference (published in IEEE ICDM, and IEEE TKDE)
 - DTV program recommender and virtual channel
- 5. Personal Research:
 - Topographical neural Development Model (EvBrain) (Published in Artificial Life, MIT)
- 6. In Graduate School in KAIST
 - Korean Morphological Analyzer
 - Korean Noun Extractor for Information Retrieval
 - Graduate paper: English Part-Of-Speech Tagger using MRF (published in COLING)
- 7. In Undergraduate school in KAIST
 - Individual research course: Bottom-up Korean Parser in prolog,

Programming Skills

C/C++, Python, Perl, Javascript, Prolog, PHP, MySQL, Java.