

Curriculum Vitae

Heuseok Lim

PERSONAL DATA

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Work Address: Lyceum Room 309, Korea University, Anam-Dong,
SeongBuk-Gu, Seoul, Korea

Present Position: Professor, Department of Computer Science Education, College of Education,
Korea University, Korea



ACADEMIC POSITIONS

2008-Present Professor, Dept. of Computer Science Education, Korea University, Korea

2011-2012 Visiting Professor, Dept. of Computer Science, Univ. of Colorad at Boulder

2004-2008 Associate Professor, Dept. of Computer Information Software, Hanshin University

1999-2004 Assistant Professor, Dept. of Information Communication, Baesuk University

EDUCATION

Ph.D. in Computer Science, Korea University, 1997.

M.A. in Computer Science, Korea University, 1994.

B.A. in Computer Science, Korea University, 1992.

Research Interests

Natural Language Processing

Brain-Computer Interface

Cognitive-Neuro Language Processing in Human Brain

Computer Science Education

Information Retrieval

Journal Publications

1. "A Method for Measuring Cooperative Activities in a Social Network Supported Learning Environment", *Wireless Personal Communications*, Vol.89, No.863, pp.863-879, 2016
2. "A solution-based intelligent tutoring system integrated with an online game-based formative assessment: development and evaluation", *Educational Technology Research and Development*, Vol.64, No.4, pp.787-808, 2016
3. "Applying an online game-based formative assessment in a flowchart-based intelligent tutoring system for improving problem-solving skills", *COMPUTERS & EDUCATION*, 3, 2016
4. "Predicting Second Language Proficiency Level Using Linguistic Cognitive Task and Machine Learning Techniques", *WIRELESS PERSONAL COMMUNICATIONS*, 1, 2016
5. "A Method for Measuring Cooperative Activities in a Social Network Supported Learning Environment", *WIRELESS PERSONAL COMMUNICATIONS*, 10, 2015
6. "The biometric signature delegation scheme to balance the load of digital signing in hybrid P2P networks", *PEER-TO-PEER NETWORKING AND APPLICATIONS*, 7, 2015
7. "Mining students activities from a computer supported collaborative learning system based on peer to peer network", *PEER-TO-PEER NETWORKING AND APPLICATIONS*, 1, 2015
8. "A study for the mechanism of expression of individual creativity throughout the social learning platform in cluster computing environment", *CLUSTER COMPUTING*, 6, 2015
9. "A study on factor analysis to support knowledge based decisions for a smart class", *INFORMATION TECHNOLOGY AND MANAGEMENT*, 4, 2015
10. "Strategic Analysis and Success Factors of the Enterprises through the Convergence", *International Journal of Applied Engineering Research*, 11, 2014
11. "An Integrated Teaching and Learning Assistance System Meeting Requirements for Smart Education", *Wireless Personal Communications*, 4, 2014
12. "A computational model explaining language phenomena on Korean visual word recognition", *COGNITIVE SYSTEMS RESEARCH*, 3, 2014.
13. "Acquiring lexical knowledge using raw corpora and unsupervised clustering method", *Cluster Computing*, 9, 2013.
14. "Real-time vehicle tracking mechanism with license plate recognition from road images", *JOURNAL OF SUPERCOMPUTING*, 7, 2013.
15. "A Lesson Plan Platform for Smart Education", *Global Journal on Technology*, Vol 4 (2013): 3rd World Conference on Innovation and Computer Science (INSODE-2013), 4, 2013.
16. "The Biometric based Mobile ID and Its Application to Electronic Voting", *KSII TRANSACTIONS ON INTERNET AND INFORMATION SYSTEMS*, 1, 2013.

17. "Automatic extraction of user's search intention from web search logs", MULTIMEDIA TOOLS AND APPLICATIONS, 11, 2012.
18. "Design of a structured plug-in smart education system", Lecture Notes in Electrical Engineering, 1, 2012.
19. "Sentiment-Property Extraction Using Korean Syntactic Features", Future Information Technology, Application, and Service, 6, 2012.
20. "Unsupervised Lexical Entry Acquisition Model based on Representation of Human Mental Lexicon", Information, June 2011.
21. "Brain-Operated Typewriter using the Language Prediction Model", KSII, The Korean Society for Internet Information, Oct, 2011.
22. "A Computational Model for simulating Korean Visual Word Recognition," Journal of Information, Vol.14, No.8, 2011. [To be published]
23. "Unsupervised Lexical Entry Acquisition Model based on Representation of Human Mental Lexicon," Journal of Information, Vol.14, No.7, 2011. [To be published]
24. "Automatic extraction of user's search intention from web search logs," MULTIMEDIA TOOLS AND APPLICATIONS, pp.1380-7501, 13 2011.
25. "Natural language-based user interface for mobile devices with limited resources," Consumer Electronics, IEEE Transactions on, November 2010, Vol.56, No.4, pp.2086-2092, 2010.
26. "The Biometric based Convertible Undeniable Multi-Signature Scheme to Ensure Multi-Author Copyrights and Profits," WIRELESS PERSONAL COMMUNICATIONS, pp.0929-6212, April 2011. [Online First]
27. "Real-time vehicle tracking mechanism with license plate recognition from road images," Journal of Supercomputing, pp1-12, March 2011. [Online First]
28. "Field programmable gate array-based Haar classifier for accelerating face detection algorithm," IET Image Processing, pp.1751-9659, June 2010.
29. "A Personalized English Vocabulary Learning System based on Cognitive Abilities related to Foreign Language Proficiency," KSII Transactions on Internet and Information Systems, Vol.4, No.4, pp.595-617, 2010.
30. "Phonological Recoding in the Second Language Processing," Lecture Notes in Computer Science, Vol.6019, No.4, pp.370-375, 2010.
31. "Using Virtual Platform in Embedded System Education," COMPUTER APPLICATIONS IN ENGINEERING EDUCATION, 2010.
32. "An MLP-based feature subset selection for HIV-1 protease cleavage site analysis," Journal of Artificial intelligence in medicine, Vol.48, No.2-3, pp.83-89, 2010.

33. "A Personalized CALL system considering users cognitive abilities," Lecture Notes in Computer Science, Vol.6019, No.4, pp.376-384, 2008.
34. "Mental representation and processing involved in comprehending Korean regular and irregular verb Eojeols: An fMRI and reaction time study," Lecture Notes in Computer Science, Vol.4232, pp.247-254, 2006.
35. "Word Frequency Effect and Word Similarity Effect in Korean Lexical Decision Task and Their Computational Model," Lecture Notes in Computer Science, Vol.4234, pp.331-340, 2006.
36. "A Computational Korean Lexical Access Model Using Artificial Neural Network," Lecture Notes in Bioinformatics, Vol.4115, pp.693-701, 2006.
37. "A computation model of Korean lexical processing," Advances in Natural Computation, Proceedings, Vol.3610, pp.844-849, 2005.
38. "A Computational Korean Mental Lexicon Model for a Cognitive-Neuro Scientific System," Lecture Notes in Computer Science, Vol.3681, pp84-89, 2005.
39. "Feature-Based Korean Grammar Utilizing Learned Constraint Rules," Computational Intelligence, Vol.21, No.1, pp.69-89, Blackwell, January 2005.
40. "An Application of Information Retrieval Technique to Automated Code Classification," Lecture Notes in Artificial Intelligence, Vol.3681, pp.90-96, 2005.
41. "An Automatic Code Classification System by Using Memory-Based Learning and Information Retrieval Technique," Lecture Notes in Computer Science, Vol.3689, pp577-583, 2005.
42. "A Computation Model of Korean Lexical Processing," Lecture Notes in Artificial Intelligence, Vol.3610, pp.844-849, 2005.
43. "A Computational Model of Korean Mental Lexicon," Lecture Notes in Artificial Intelligence, Vol.3480, pp.1129-1137, 2005.
44. "Improving kNN Based Text Classification with Well Estimated Parameters," Lecture Notes in Computer Science, Vol3316, pp516-523, 2004.
45. "Automated Classification of Industry and Occupation Codes Using Document Classification Method" Lecture Notes in Computer Science, Vol.3316, pp827~833, 2004.
46. "Word Frequency Effect and Word Similarity Effect in Korean Lexical Decision Task and Their Computational Model," Lecture Notes in Computer Science, Vol.4234, pp.331-340, 2003.
47. "Effective Methods for Improving Naive Bayes Text Classifiers," Lecture Notes in Computer Science, Vo2417, No.2, pp414-423, 2002.
48. "Twoply Hidden Markov Model:A Korean POS Tagging Model Based on Morpheme-Unit wth Eojeol-Unit Context," International Journal of Computer Processing of Oriental Languages, Vol .12, No.1, pp.5-29, 1998.

49. "The Life Satisfaction Analysis of Middle School Students Using Korean Children and Youth Panel Survey Data", The Journal of Digital Convergence, Vol.14, No.2, pp.197~208, 2016. [in Korean], 2016.02
50. "The Study of Lexical Statistics Analysis for Elementary School Textbook: Focusing on Comparing the SEJONG Corpus in Korean", The Journal of Korean association of computer education, Vol.18, No.1, pp.99~108, 2015. [in Korean], 2015.01
51. "Development of the Potential Query Recommendation System using User's Search History", The Journal of digital policy & management [in Korean], 2013.07
52. "Design and Development of the Second language Proficiency Method based on Cognitive Ability of Learner", The Journal of digital policy & management [in Korean], 2013.03
53. "Analysis for Teaching and Learning Methods in K-12 Smart Education", The Journal of digital policy & management [in Korean], 2013.02
54. "Exploring on Digital Textbooks for Teachers and Students", The Journal of digital policy & management [in Korean], 2013.02
55. "A Study on Smart Knowledge Sharing System with Friends", The Journal of digital policy & management [in Korean], 2013.02
56. "Development of Information Visualization Tool using Knowledge Representation", The Journal of digital policy & management [in Korean], 2012.10
57. "A Conceptual Model of Smart Education Considering Teaching-Learning Activities and Learner's Characteristics", The Journal of Korean association of computer education, Vol.15, No.4, pp.41~49, 2012. [in Korean], 2012.07
58. "A Detection Method of Similar Sentences Considering Plagiarism Patterns of Korea Sentence," Korea Association of Computer Education, Vol.13, No.6, pp.79~89, 2011. [in Korean]
59. "Development of Foreign Language Fluency Diagnosis Tools For Brain Scientific Language Learning" Korea Association of Computer Education, Vo.113, NO.1, pp.37~44, 2010. [in Korean]
60. "The automatic Lexical Knowledge acquisition using morpheme information and Clustering techniques " Korea Association of Computer Education, Vol.13, NO.1, pp.65~73, 2010. [in Korean]
61. "A Personalized English Vocabulary Learning System Based on Cognitive Abilities Related to Foreign Language Proficiency" KSII TRANSACTIONS ON INTERNET AND INFORMATION SYSTEMS, Vol.4, No.4, pp595-617, 2010. [in Korean]
62. "Automatic Extract User Intention from Web Seragh Log" Korea Association of Computer

- Education, Vol.12, NO.6, pp.21~32, 2009. [in Korean]
63. "The Effects of Working Memory Load on Word Frequency" The Korea Academia-industrial cooperation Society, Vol.10, No.3, pp.567~671, 2009. [in Korean]
 64. "Human Powered Question and Answering System by using Real-Time : rPodo System " The Korea Academia-industrial cooperation Society, Vol.9, No.3, pp.721~726, 2008. [in Korean]
 65. "An Implementation of Intelligent World Replay Game Considering Characteristics of Real World Language " The Korea Academia-industrial cooperation Society, Vol.9, No.1, pp.122~128, 2008. [in Korean]
 66. "Viewpoint calculation time in word recognition model and the phonological neighborhood effect neighbors" The Korea Academia-industrial cooperation Society, Vol.8, No.4, pp.803~809, 2007. [in Korean]
 67. "Korean vocabulary automatic acquisition system" The Korea Academia-industrial cooperation Society, Vol.8, No.5, pp.1087~1091, 2007. [in Korean]
 68. "Viewpoint calculation time in word recognition model and the phonological neighborhood effect neighbors" The Korea Academia-industrial cooperation Society, Vol.8, No.4, pp.803~809, 2007. [in Korean]
 69. "An Example-based Korean Standard Industrial and Occupational Code Classification " The Korea Academia-industrial cooperation Society, Vol.7, No.4, pp.594~601, 2006. [in Korean]
 70. "Hidden Markov Model and Boundary Layer Named Entity Recognition Using Information" The Korea Academia-industrial cooperation Society, Vol.7, No.2, pp.182~187, 2006. [in Korean]
 71. "Design and Implementation of Computational Model Simulating Language Phenomena in Lexical Decision Task" Korea Association of Computer Education, Vol.9, No.2, pp.89~100, 2006. [in Korean]
 72. "An Automatic Coding System of Korean Standard Industry / Occupation Code Using Example - based Learning" The Korea Contents Association, Vol.5, No.4, pp.169~179, 2005. [in Korean]
 73. "Korean Sentence Boundary Detection Using Memory-based Machine Learning" The Korea Contents Association, Vol.4, No.4, pp.133~139, 2005. [in Korean]
 74. "An automated Classification System of Standard Industry and Occupation Codes by Using Information Retrieval Techniques" Korea Association of Computer Education, Vol.7, No.4, pp.51~60, 2004. [in Korean]
 75. "Two Statistical Models for Automatic Word Spacing of Korean Sentences" Korean Institute of Information Scientists and Engineers, Vol.30, No.4, pp.358~372, 2003. [in Korean]
 76. "Korean compound noun form of the morphological representation" Korean speech-language &

- Hearing Association, Vol.12, No.1, pp.177~196, 2003. [in Korean]
77. "A BM25 based Passage Retrieval System for Developing an Efficient Question and Answering System" Korea Association of Computer Education, Vol.6, No.4, pp.23~30, 2003. [in Korean]
 78. "Improving of kNN - based Korean text classifier by using heuristic information" Korea Association of Computer Education, Vol.5, No.3, pp.37~46, 2002. [in Korean]
 79. "Development and implementation of an automatic document classifier" Korean Society For Internet information Vol.3, No.3, pp. 48~56, 2002. [in Korean]
 80. "Comparison of the frequency in Korean Corpus" Korean Society of Logopedics and Phoniatrics, Vol.1, pp.93~96, 2002. [in Korean]
 81. "Twoply HMM: Considering Korean Korean POS tagging model of morpheme" Korean Institute of Information Scientists and Engineers, Vol.24, No.12, pp.1502-1512, 1997. [in Korean]
 82. "Using transformation rules, words are Korean speech tagger tags" Korean Institute of Information Scientists and Engineers (B), Vol.24, No.6, pp.673-684, 1997. [in Korean]
 83. "Effective exclusion Korean Morphological Analyzer Using information" Korean Institute of Information Scientists and Engineers, Vol. 22, No. 6, pp.957-964, 1995. [in Korean]

Conference Publications

1. "Adaptive Learning System using Real-time Learner Profiling", Journal of Digital Convergence, 2, 2014.
2. "The EEG-based Feature for Emotion Recognition", KSII The International Conference on Internet(ICONI), Dec. 2011.
3. "A Lexical Knowledge Acquisition Model Using Unsupervised Learning Method," Proceedings of APIC-IST & ICONI 2010, Dec.2010.
4. "Design of a brain operated korean typewriter using the language prediction model," Proceedings of APIC-IST & ICONI 2010, Dec.2010.
5. "Extracting Search Intentions from Web Search Logs," Proceedings of International Conference on Information Technology Convergence and Services, Aug.2010.
6. "Acquiring Korean Lexical Entry from a Raw Corpus," Proceedings of International Conference on Information Technology Convergence and Services, Aug.2010.
7. "Extracting Search Intentions from Web Search Logs," Proceedings of International Conference on Information Technology Convergence and Services, Aug.2010.
8. "A Computer Assisted Language Learning system based on Principles of HUMAN Language

Processing: The English Brain Enhancement System,” Proceeding of APIC-IST & ICONI 2009, pp.319~324, 2009.

9. "A Connectionist Model of Korean Visual Word Recognition,” Proceeding of APIC-IST & ICONI 2009, 2009.
10. "Adaptive User Profile Management for Community-based Question Answering System,” Proc. of APIC-IST & ICONI 2009, pp.37~41, 2009.
11. "Neuro-Cognitive Computational Model of Automatic Lexical Acquisition,” International Symposium on Control and Automation, 2008.
12. "A Cognitive-Neuro Computational Lexical Acquisition Model,” Proceeding of International Conf. on Cognitive Neurodynamics, 2007.
13. "A Computational Model of Korean Lexical Decision Task and Its Comparative Analysis by Using Connectionist Model,” Third International Conference on Natural Computation, pp.511-515, 2007
14. “The Phonological Syllable Plays a Role in Lexical Access in Korean Visual Word Recognition,” ICNC 2007. Third International Conference on, 2007.
15. "The Cortical Activation Associated with Emotional and Linguistic Processing Involved in Word Recognition,” OHBM 11th Annual Meeting, 2006
16. "The Inhibition Effect of the Phonological Neighborhood Size In Word Recognition: Behavioral and fMRI Study,” OHBM 11th Annual Meeting, 2006
17. "Mental representation of the morphemes involved in Korean noun and verb Eojeols,” Proceeding of the Int. Conference on Cognitive Science, pp.299, 2003.
18. "A Syllable based word recognition model for Korean noun extraction,” Proceeding of Annual meeting of the ACL, pp.471-478, 2003.
19. "An improved kNN Learning based Korean text classifier with heuristic information,” Proceeding of ICONIP, pp.731-735, 2002.
20. "A comparative evaluation of Korean text categorization based on KNN Learning,” Proceeding of the 3rd workshop on Asian Language Resources and Int. Standardization, pp.51, 2002.
21. “A new method of parameter estimation for multinomial naive bayes text classifiers,” SIGIR '02 Proceedings of the 25th annual international ACM SIGIR conference on Research and development in information retrieval, 2002.
22. "Automatic word spacing using hidden markov model for refining Korean text corpora” Proc. of the International Conference on Artificial Intelligence, pp.372, 2002.
23. "An Automated Coding System for Korean Standard Industrial and Occupational

Classification” The proceeding of 19th International Conference on Computer Processing of Oriented Languages (ICCPOL), pp.278-281, 2001.

24. "Introduction to Special Issues on Computational Lexical Analysis of Korean," Proceeding of 7th International Conference on Neural Information Processing, Vol.1, pp.593-597, 2000.
25. "A Korean Corpus Annotating Tool Minimizing Human Intervention" Proc. of the International Conference on Computational Linguistics, 2000.
26. "An Efficient Tool for Building a Large Part-of-Speech Annotated Corpus" Proc. of the International Conference on Artificial Intelligence, pp.1225-1230, 2000.
27. "Latent Semantic Indexing Model for Boolean Query Formulation" Proc. of 23rd the 23rd Annual International ACM SIGIR Conference on Research and Development in Information Retrieval, pp.310-312, 2000.
28. "A Korean Part-of-Speech Tagging System for Minimizing Human Intervention and Maintaining Tagging Consistency" Proc. of 5th Natural Language Processing Pacific Rim Symposium, pp.62-66, 1999.
29. "Twoply Hidden Markov Model: A Korean POS Tagging Model Based on Morpheme-Unit with Eojeol-Unit Context" Proc. of the International Conference on Computer Processing of Oriental Language(ICCPOL-97), pp.456-460, 1997.
30. "A Korean Part-of-Speech Tagger using Transformation-based Error-driven Learning" Proc. of the International Conference on Computer Processing of Oriental Language (ICCPOL-97), pp.456-460, 1997.
31. "A Korean Transformation-based Part-of-Speech Tagger with Lexical Information of mistagged Eojeol" Proc. of the 2nd Korea-China Joint Symposium on Oriental Language Computing (KCOLC-96), pp.119-124, 1996.
32. "An Efficient Korean Morphological Analysis using Exclusive Information" Proc. of the International Conference on Computer Processing of Oriental Language (ICCPOL-95), Hawaii, pp.255-258, 1995.
33. "Emotional image acquisition using emotional words” HCLT (Human & Cognitive Language Technology 114-117 , 2010. [in Korean]
34. “EEG-based computer interface developed using the Functional Software,” KSII (Korean Society For Internet information), 2010. [in Korean]
35. “Mental lexicon based on the representation of human forms automatically acquire lexical knowledge” KSII (Korean Society For Internet information), 2010. [in Korean]
36. “Using smart diagnostic system is the ability” KSII (Korean Society For Internet information), 2010. [in Korean]

37. "Unplugged Contents Design of Smartphone for Education of Informatics" KSII (Korean Society For Internet information), 2010. [in Korean]
38. "Brain Scientific Developments of Foreign Language Fluency Diagnosis Tools" KSII (Korean Society For Internet information), 2009. [in Korean]
39. "A design of Lexical-Knowledge Acquisition model based on unsupervised learning" KSII (Korean Society For Internet information), 2009. [in Korean]
40. "The purpose of the game with the user's search intention using automated acquisition system design" The Korea Academia-industrial cooperation Society, 2009. [in Korean]
41. "User Click Log Analysis Using the user search intention" The Korea Academia-industrial cooperation Society, 2009. [in Korean]
42. "Movement-related EEG signal generator designed for Korean Using" The Korea Academia-industrial cooperation Society, 2009. [in Korean]
43. "Human Powered Question and Answering System by using Real-Time Interactive Communication : rPodo System" The Korea Academia-industrial cooperation Society, 2007. [in Korean]
44. "Liberal model, calculated using the neighboring effects appear in Korean Visual Word Recognition" The Korea Academia-industrial cooperation Society, 2007. [in Korean]
45. "Acquisition system based on user participation and real-time wisdom" The Korea Academia-industrial cooperation Society, 2007. [in Korean]
46. "Cognitive Neuroscience liberal model-based calculations of the Korean vocabulary acquisition" The Korea Academia-industrial cooperation Society, 2007. [in Korean]
47. "Liberal model calculations using the model design and implementation of Korean vocabulary acquisition" The Korea Academia-industrial cooperation Society, 2007. [in Korean]
48. "The Cortical Activation Associated with Emotional and Linguistic Processing Involved in Word Recognition" The Korean Society for Cognitive Science, 2006. [in Korean]
49. "Standard Document Format for Portable Mobile Devices" Korean Society For Internet information , 2005. [in Korean]
50. "Korean phonological information in visual word recognition process, calculating capitalist model for the investigation of the role" Korea Association of Computer Education , pp.454-460, 2005. [in Korean]
51. "Cognitive Neuroscience Neural liberal Korean Syllable-based word recognition model calculations" Korea Association of Computer Education, pp.454-460, 2005. [in Korean]
52. "Korean syllable word recognition unit in the lexical approach" Hangul and Korean

- Information Processing, 2004. [in Korean]
53. "Comparison of the frequency in Korean Corpus," Phonetic society of Korea, pp.93~95, 2002. [in Korean]
 54. "Type of mistake you see college students in Korea English Composition," Korean Brain Society, 2002. [in Korean]
 55. "Representation of Korean compound noun forms," Korean Brain Society, 2002. [in Korean]
 56. "Korean words are based Information Processing Model for Cognitive Neuroscience," Korean Brain Society, 2002. [in Korean]
 57. "Simulation Model of Korean words," Acoustical Society Korea, 2002. [in Korean]
 58. "Morphological Characteristics of Verbs in Korean Information Processing," The Korean Society for Cognitive Science pp.137~143, 2002. [in Korean]
 59. "Nanseojeung calculate the structure of lexical processing in the case shown ," Korean Brain Society pp.93~94, 2002. [in Korean]
 60. "Morphological Characteristics of Verbs in Korean Information Processing (I): information processing prototype," Korean Brain Society, 2002. [in Korean]
 61. "Morphological Characteristics of Verbs in Korean information processing (II): connecting end information processing," Korean Brain Society, 2002. [in Korean]
 62. "Using information retrieval techniques Industry / Occupation Code List Tool," Korea Multimedia Society, 2001. [in Korean]
 63. "Younghan for the N-best speech machine translation Tagger," Hangul and Korean Information Processing pp.15-19, 1998. [in Korean]
 64. "Linguistic knowledge and statistical information using the complementary characteristics of speech tagging," Hangul and Korean Information Processing, pp.102-108, 1997. [in Korean]
 65. "Rule-based lexical rules for Korean POS Tagging acquisition scheme to minimize the manual," Korean Institute of Information Scientists and Engineers, 1997. [in Korean]
 66. "Rule-based strain improvement Korean speech tagger," Hangul and Korean Information Processing, pp.216-221, 1996. [in Korean]
 67. "Considering the context of words are units of morpheme Korean POS Tagging Model," The Korean Society for Cognitive Science pp.97-106, 1996. [in Korean]
 68. "Considering Korean POS Tagging based transformation rules," Artificial Intelligence Teams pp.3-10, 1996. [in Korean]
 69. "Analysis of Korean compound nouns using statistical information " Korean Institute of Information Scientists and Engineers pp.925-928, 1995. [in Korean]
 70. "Using Hidden Markov Model Two Phase Korean POS Tagging" Hangul and Korean

Information Processing pp.305-312, 1994. [in Korean]

71. “Stemming of words are generated in step Analysis Method Ambiguity” Korean Institute of Information Scientists and Engineers Vol.20, No.1, pp.773-776, 1993. [in Korean]

Books and Book chapters

2017.03 Computational Thinking for Novice, Human Science [in Korean]

2011.09 Search Engines : Information Retrieval in Practice [Translated in Korean]

2010.08 Please help! We've got the iPhone 4 [in Korean]

2010.05 Please help! We've got the iPhone 3 [in Korean]

2010.03 Data Structures and Algorithm Analysis in C++ [Translated in Korean]

2009.04 The Handbook of East Asian Psycholinguistics, Edited by Chungmin Lee, Cambridge University Press, 2009

COMMITTEES

2017.02 ~ 2017.02 The 1st International Conference on Interdisciplinary research on Computer science, Psychology, and Education(ICICPE2017), Steering Committee

2015.06 ~ 2015.07 The 5th International Conference on Convergence Technology(ICCT2015), Program Committees

2014.07 ~ 2014.07 The 4th International Conference on Convergence Technology(ICCT2015), Program Committees

2013.07 ~ 2013.07 The 3rd International Conference on Convergence Technology(ICCT2015), Program Committees

2010.03 ~ 2012.06 The 50th Annual Meeting of the ACL (ACL2012), Local Arrangements Committee

2011.03 ~ 2011.12 International Conference on Internet (www.iconi.org), Program Chair

2010.08 ~ 2011.06 The 6th Europe Asia Pacific International Conference on Information Science and Technology, (EAPIC-IST2011), Program Chair

2010.08 ~ 2010.10 Conference of Korean Association of Computer Education, Program Chair

2010.03 ~ 2010.12 International Conference on Internet (www.iconi.org), Workshop Chair

2009.03 ~ 2009.12 International Conference on Internet (www.iconi.org), Publication Chair

2009.12 ~ 2009.12 The Korea Academia-industrial cooperation Society, Direct Assistance Chair

2009.10 ~ 2009.12 Korean Society for Internet Information Conference, General Chair

2009.12 ~ Present Korea Copyright Commission, Advisory Member

2009.03 ~ 2010.02 Korean Society for Internet information, Editorial Board

Invited Talks and Presentations (in Recent 3 years)

February 2017, "Introduction to Computational Korean Language Processing", 플라자호텔 COEX

November 2016, "인공지능 기술의 재조명 : 장밋빛 미래? 회색빛 미래?", 백석대학교

October 2016, "Intelligent UI/UX for Smart Seniors", Invited Speaker at International Conference on Science in Information Technology

September 2016, "인공지능 기술과 미래사회 : AI는 적인가? 친구인가?", 삼성전자

August 2016, "인공지능 기술과 미래사회", 삼성전자

August 2016, "100세 시대의 인공지능과 미래사회", 성남고령친화종합체험관

September 2013, "Innovative Smart Classes in Korea: Outcomes and Concerns", Invited Speaker at Mobile Learn Asia 2013. slide / Radio interview

July 2011 "Functional Brain Imaging Methods and its Application to ICT Research", Ministry of Culture, Sports and Tourism

July 2011 "Introduction to Brain Computer Interfaces" Seminar in Korea Information Processing Society

June 2011 "Using Smart Devices on Smart Learning," Faculty Summit of Korea University

Apr 2011 "Converging Technologies of Brain Science and ICT", Korean E-learning Association

Mar 2010 "Brief Introduction to Information Retrieval," SKT Company

June 2010 "Rethinking Computer games," Workshop on Computer Game and its Application

July 2010 "Social Search and People-powered Search," Workshop on Internet Application

Apr 2009 "Brain-Computer Interface," Korea University Hospital

Aug 2009 "A Brain-based English Learning System," Seminar in HANSOL Ltd.

TEACHING (in Recent 5 years)

Searching for Information, 2011

This class covers basic theories of information retrieval and techniques to implement a practical information retrieval engine.

Programing Languages, 2011

Discussion of the important issues in the specification, design and implementation of programming languages with emphasis on imperative programming. The objective of the course is not to master a

set of programming languages but rather the emphasis is on evaluating alternative ways of providing various programming language features, and studying the trade-off involved.

Multimedia Information Processing, 2011

Many current information technologies will be covered such as web2.0, search engines, Brain computer interface, computational models of brain function.

Special Lecture of Searching for Information, 2010

This class deals with advanced topic of information retrieval and natural language including personalized IR, language modelling, and recent efficient search algorithm

Natural Language Processing, 2010

This class covers the advanced topics in natural language processing including statistic language processing, language modeling, and machine translation.

Advanced Searching for Information, 2009

This class deals with advanced topic of information retrieval and natural language including personalized IR, language modelling, and recent efficient search algorithm.

Human Computer Interface, 2009

This class deals with Brain Computer Interface (BCI) and Brain Machinery Interface (BMI) technologies. From the basic theoretical principles to some applications are covered.

Discrete Mathematics, 2009

This class provides introduction to the primary themes in a discrete mathematics course and demonstrates the relevance and practicality of discrete mathematics to a wide a wide variety of real-world applications

Information Technology Seminar, 2008

Many current information technologies will be covered such as web2.0, search engines, Brain computer interface, computational models of brain function.

Advanced Searching for Information, 2008

Contract and Grant Support (in Recent 5 Years)

Title: Development of a cognitively responsive customized UI / UX technology for smart seniors

PI: HyeSung Ji

Duration: May 2016 – December 2018

Amount: \$2,500,000

Title: Distribution and diffusion of of personal and collective intelligence as Digitalized Contents

PI: WonHui Yu

Duration: March 2014 – February 2017

Amount: \$1,500,000

Title: Research and development of a recommendation model of personalized contents consumption route considering user preference changes
PI: YeongWook Yang
Duration: June 2016 – May 2018
Amount: \$500,000

Title: Personalized Search using Users' Click Thorough Data
PI : Heuseok Lim
Duration: May 2009 – April 2012.
Amount: \$300,000

Title: The study on the neuro-cognitive processes and neural network of the Korean visual word recognition
PI : Chanwhan Lee
Duration: November 2009 – July 2012.
Amount: \$200,000

Title: Development of a Lexical Analyzer considering characteristics of SNS Data
PI : Heuseok Lim
Duration: Dec. 2010 – May 2011.
Amount: \$40,000

Title: Technology of the Emotion Measurement and Standardization on Functional Contents
PI : Kichun Nam
Duration: May 2010 – Mar. 2011.
Amount: \$1,800,000

Title: Development of a CALL System based on Brain Scientific Principles
PI : Wonkyu Lee
Duration: Sep. 2008 – Aug. 2009.
Amount: \$300,000

Title: A Detection Method of Similar Sentences for Plagiarism System
PI : Heuseok Lim
Duration: June. 2008 – May 2009.
Amount: \$10,000

Title: The study on the neuro-cognitive processes and neural network of the Korean visual word recognition
PI : Kichun Nam
Duration: Apr. 2002 – Mar. 2008.
Amount: \$500,000

Title: An Automatic User Classification using User's Profile for a Social Search
PI : Heuseok Lim
Duration: May. 2007 – Apr. 2008.
Amount: \$40,000

Industrial Research Experience

Professional Researcher, Samsung Advanced Institute of Technology (SAIT), 1997-1999. My work at SAIT was to develop a lexical analyzer of English which was used for an automatic English-Korean machine translation system.