

Curriculum Vitae

A. Personal Identification

Name Jaesung Lee
Position Ph. D., Research Professor in Research Affairs of Chung-Ang University
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Address School of CSE, Chung-Ang Univ., 84 Heukseok-Ro, Dongjak-Gu, Seoul 06974, Korea
Interest Artificial Intelligence, Affective Computing, Machine Learning, Multi-label Learning

B. Education

2009 – 2013 Ph.D., School of Computer Science and Engineering, CAU
Dissertation: Multivariate Feature Selection for Multi-label Classification
Academic Adviser: Prof. Dae-Won Kim
2007 – 2009 M.S., School of Computer Science and Engineering, CAU
Thesis: Applying the Feature Selection Method for Improvement of Classification Accuracy of Clinical Data
Academic Adviser: Prof. Dae-Won Kim
2001 – 2007 B.S., School of Computer Science and Engineering, CAU
Thesis: A Study on Expansion Clustering for Initialized Set
Academic Adviser: Prof. Dae-Won Kim

C. Work Experiences

2016 – 2017 Research Professor, Research Affairs of Chung-Ang University, CAU
2014 – 2017 Senior Researcher in The Research Center for Information and Communications, CAU
2014 – 2016 Research Professor in Next Generation Big Data Research Team (BK21PLUS), CAU
2013 – 2014 Full-time Researcher in Next Generation Big Data Research Team (BK21PLUS), CAU
2009 – 2011 Research Assistant A, CAU

D. Academic Activities

D.1. Journals

2013 – 2016 Reviewer, IEEE Transactions on Knowledge and Data Engineering
2015 – 2016 Reviewer, IEEE Transactions on Neural Networks and Learning Systems
2016 Reviewer, Bioinformatics
2015 Reviewer, Information Sciences
2014 – 2016 Reviewer, Pattern Recognition
2016 Reviewer, Expert Systems with Applications
2015 Reviewer, Ad hoc Networks
2014 Reviewer, Pattern Recognition Letters
2013 – 2016 Reviewer, Multimedia Tools and Applications
2015 Reviewer, Journal of Supercomputing

D.2. Conference

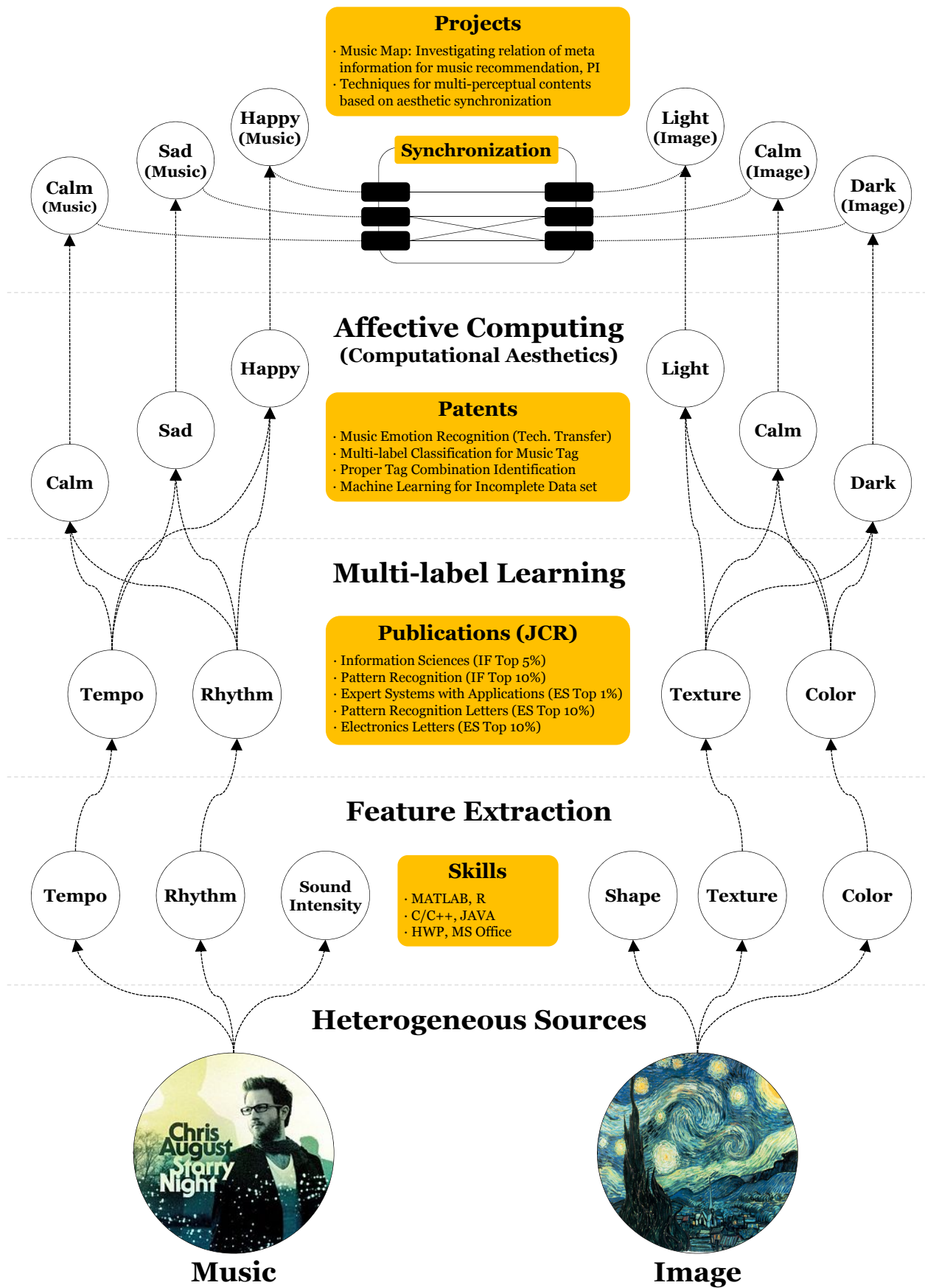
2016 TPC Member, 2016 8th International Conference on Machine Learning and Computing
February 22-23, Hong Kong, China

D.3. Lecture

2014 Part-time Lecturer: Big Data Mining
2014 Part-time Lecturer: Data Structure
2014 Part-time Lecturer: Machine Learning for Big Data
2013 Part-time Lecturer: Artificial Intelligence
2013 Part-time Lecturer: Data Mining
2013 Part-time Lecturer: Algorithm
2013 Part-time Lecturer: Advanced Artificial Intelligence

E. Research Detail

Aesthetic Synchronization between two heterogeneous information sources



F. International Publications

F.1. Published from SCI(E) Journals (JCR 2015)

Jaesung Lee and Dae-Won Kim,
SCLS: Multi-label Feature Selection based on Scalable Criterion for Large Label Set
Pattern Recognition (IF Top 8%, ES Top 4%),
Accepted, 10 January **2017** (Published Online: 10 January 2017)
Publisher: Elsevier Ltd, ISSN: 0031-3203, Ack: NRF-2016R1C1B1014774 (J. Lee)

Jaesung Lee, Chang-Ha Lee, Dae-Won Kim, and Bo-Yeong Kang,
Smartphone-Assisted Pronunciation Learning Technique for Ambient Intelligence
IEEE Access (IF Top 46%, ES Top 41%),
Accepted, 13 December **2016** (Published Online: 19 December 2016)
Publisher: IEEE Inc., ISSN: 2169-3536, Ack: NRF-2016R1A2B4006873 (B.-Y. Kang)

Jaesung Lee and Dae-Won Kim,
Efficient Multi-label Feature Selection using Entropy-based Label Selection,
Entropy (IF Top 32%, ES Top 30%),
18(11):1-26, 15 November **2016**
Publisher: MDPI AG, ISSN: 1099-4300, Ack: MCST-KOCCA-CT2016

Jaesung Lee, Jonghoon Chae, and Dae-Won Kim,
Effective Music Searching Approach based on Tag-Combination by exploiting Prototypical Acoustic Content,
Multimedia Tools and Applications (IF Top 30%, ES Top 17%),
Accepted, 26 April **2016** (Published Online: 4 May 2016)
Publisher: Springer, ISSN: 1380-7501, Ack: MCST-KOCCA-CT2016

Hyunki Lim, **Jaesung Lee**, and Dae-Won Kim,
Accelerating Multi-label Feature Selection based on Low-Rank Approximation,
IEICE Transactions on Information and Systems (ES Top 39%),
E99-D(5):1396-1399, 1 May **2016**
Publisher: Maruzen Co., Ltd., ISSN: 0916-8532, Ack: MCST-KOCCA-CT2015

Jaesung Lee and Dae-Won Kim,
An Effective Initialization Method for Genetic Algorithm-based Robot Path Planning using a Directed Acyclic Graph,
Information Sciences (IF Top 6%, ES Top 2%),
332(1):1-18, 1 March **2016**
Publisher: Elsevier Inc., ISSN: 0020-0255, Ack: NRF-2014R1A1A2059032

Jaesung Lee and Dae-Won Kim,
Fast Multi-label Feature Selection based on Information-theoretic Feature Ranking,
Pattern Recognition (IF Top 8%, ES Top 4%),
48(9):2761-2771, 1 September **2015**
Publisher: Elsevier Ltd, ISSN: 0031-3203, Ack: NRF-2013R1A1A2A10005255

Jaesung Lee and Dae-Won Kim,
Mutual Information-based Multi-label Feature Selection using Interaction Information,
Expert Systems with Applications (IF Top 8%, ES Top 2%),
42(4):2013-2025, 1 March **2015**
Publisher: Elsevier Ltd, ISSN: 0957-4174, Ack: NRF-2013R1A1A2A10005255

Jaesung Lee and Dae-Won Kim,
Memetic Feature Selection Algorithm for Multi-label Classification,
Information Sciences (IF Top 6%, ES Top 2%),
293(1):80-96, 1 February **2015**
Publisher: Elsevier Inc., ISSN: 0020-0255, Ack: NRF-2013R1A1A2A10005255

Hyunki Lim, **Jaesung Lee**, and Dae-Won Kim,
Multi-label Learning using Mathematical Programming,
IEICE Transactions on Information and Systems (ES Top 39%),
E98-D(1):197-200, 1 January **2015**
Publisher: Maruzen Co., Ltd., ISSN: 0916-8532, Ack: MCST-KOCCA-CT2014

Bo-Yeong Kang, Miao Xu, **Jaesung Lee**, and Dae-Won Kim,
ROBIL: Robot Path Planning Based on PBIL Algorithm,
International Journal of Advanced Robotic Systems (ES Top 48%),
11(147):1-14, 15 September **2014**
Publisher: InTech Europe, ISSN: 1729-8806, Ack: NRF-2012R1A1A1001969

Dae-Won Kim, **Jaesung Lee**, Hyunki Lim, Jeongbong Seo, and Bo-Yeong Kang,
Efficient Dynamic Time Warping for 3D Handwriting Recognition using Gyroscope equipped Smartphones,
Expert Systems with Applications (IF Top 8%, ES Top 2%),
41(11):5180-5189, 1 September **2014**
Publisher: Elsevier Ltd, ISSN: 0957-4174, Ack: NRF-2013R1A1A2A10005255, CAU-RSG-2012

Jaesung Lee, Bo-Yeong Kang, and Dae-Won Kim,
Fast Genetic Algorithm for Robot Path Planning,
Electronics Letters (ES Top 12%),
49(23):1449-1451, 7 November **2013**
Publisher: Inst. Engineering Technology, ISSN: 0013-5194, Ack: NRF-2013R1A1A2A10005255, KNU-RSG-2012

Jaesung Lee and Dae-Won Kim,
Feature Selection for Multi-label Classification using Multivariate Mutual Information,
Pattern Recognition Letters (IF Top 46%, ES Top 8%),
34(3):349-357, 1 February **2013**
Publisher: Elsevier B.V., ISSN: 0167-8655, Ack: NRF-2012-0001772

Jaesung Lee, Hyunki Lim, and Dae-Won Kim,
Approximating Mutual Information for Multi-label Feature Selection,
Electronics Letters (ES Top 12%),
48(15):929-930, 17 July **2012**
Publisher: Inst. Engineering Technology, ISSN: 0013-5194, Ack: NRF-2011-0004113

Jaesung Lee and Dae-Won Kim,
Efficient Multivariate Feature Filter using Conditional Mutual Information,
Electronics Letters (ES Top 12%),
48(3):161-162, 2 February **2012**
Publisher: Inst. Engineering Technology, ISSN: 0013-5194, Ack: CAU-RSG-2008

Jaesung Lee and Dae-Won Kim,
Classifying Categorical Data Based on Adoptive Hamming Distance,
IEICE Transactions on Information and Systems (ES Top 39%),
E93-D(1):189-192, 1 January **2010**
Publisher: Maruzen Co., Ltd., ISSN: 0916-8532, Ack: CAU-RSG-2009

F.2. Published from International Journals

Jaesung Lee, Jihae Yoon, Seongwon Lee, and Dae-Won Kim,
Supervised Music Summarization for Human-Intuitive Highlight Identification,
International Journal of Machine Learning and Computing (Conference Paper, ICMLC-2016),
6(1):15-20, 1 February **2016**
Publisher: IACSIT Press, ISSN: 2010-3700, Ack: NRF-2014R1A1A2059032

Hyunki Lim, **Jaesung Lee**, and Dae-Won Kim,
Low-rank Approximation for Multi-label Feature Selection,
International Journal of Machine Learning and Computing (Conference Paper, ICMLC-2016),
6(1):42-46, 1 February **2016**
Publisher: IACSIT Press, ISSN: 2010-3700, Ack: MCST-KOCCA-CT2015

Jaesung Lee, Jinhyuk Jo, Hyunki Lim, Jong-Hoon Chae, Sang-Uk Lee, and Dae-Won Kim,
Investigating Relation of Music Data: Emotion and Audio Signals,
Lecture Notes in Electrical Engineering (Conference Paper, CSA-2014),
330:251-256, 1 January **2015**
Publisher: Springer Verlag, ISSN: 1876-1100, Ack: MCST-KOCCA-CT2014

Hyunki Lim, **Jaesung Lee**, and Dae-Won Kim
Approximating Dependency for Efficient Multi-label Feature Selection,

Lecture Notes in Electrical Engineering (Conference Paper, CSA-2014),
330:245-250, 1 January **2015**
Publisher: Springer Verlag, ISSN: 1876-1100, Ack: MCST-KOCCA-CT2014

F.3. Published from International Conferences

Jaesung Lee, Jihae Yoon, Seongwon Lee, and Dae-Won Kim,
Supervised Music Summarization for Human-Intuitive Highlight Identification,
2016 8th Int. Conf. on Machine Learning and Computing (ICMLC-2016),
Hong Kong, China, 22-23 February **2016** (NRF-2014R1A1A2059032)

Hyunki Lim, **Jaesung Lee**, and Dae-Won Kim,
Low-rank Approximation for Multi-label Feature Selection,
2016 8th Int. Conf. on Machine Learning and Computing (ICMLC-2016),
Hong Kong, China, 22-23 February **2016** (MCST-KOCCA-CT2015)

Jaesung Lee and Dae-Won Kim,
Music Categorization from Incomplete Social Tags,
The 2015 Int. Conf. on Advanced Computing and Services (ACS-2015),
Jeju Island, Korea, 24-26 February **2015** (MCST-KOCCA-CT2014)

Bo-Yeong Kang, **Jaesung Lee**, and Dae-Won Kim,
Filter versus Wrapper Approaches: Predictor Selection of Medication Adherence in Chronic Diseases,
The 2015 Int. Conf. on Advanced Computing and Services (ACS-2015),
Jeju Island, Korea, 24-26 February **2015** (NRF-2013R1A1A2A10005255)

Jinhyuk Jo, **Jaesung Lee**, and Dae-Won Kim,
Mobile-Assisted Pronunciation Training based on Mispronunciation Association Rule,
The 1st Int. Joint Conf. on Convergence, pp. 100-103,
Ho Chi Minh City, Vietnam, 4-8 February **2015** (NRF-2014R1A1A2059032)

Jaesung Lee, Jin-Hyuk Jo, Hyunki Lim, Jong-Hoon Chae, Sang-Uk Lee, and Dae-Won Kim,
Investigating Relation of Music Data: Emotion and Audio Signals,
The 6th FTRA Int. Conf. on Comput. Sci. and its Applications (CSA-2014), pp. 251-256,
Guam, USA, 17-20 December **2014** (MCST-KOCCA-CT2014)

Hyunki Lim, **Jaesung Lee**, and Dae-Won Kim,
Approximating Dependency for Efficient Multi-label Feature Selection,
The 6th FTRA Int. Conf. on Comput. Sci. and its Applications (CSA-2014), pp. 245-250,
Guam, USA, 17-20 December **2014** (MCST-KOCCA-CT2014)

Miao Xu, **Jaesung Lee**, Sang-Kyu Bahn, and Bo-Yeong Kang,
Path Planning for Robot using Population-Based Incremental Learning,
2014 IEEE 4th Ann. Int. Conf. on Cyber Technol. in Autom., Control and Intell. (IEEE-CYBER), pp. 474-476,
Hong Kong, China, 4-7, June **2014** (NRF-2012R1A1A1001969)

G. Domestic Publications

G.1. Published from KCI Journals

Jaesung Lee and Dae-Won Kim,
Ranking Tag Pairs for Music Recommendation using Acoustic Similarity,
International Journal of Fuzzy Logic and Intelligent Systems,
15(3):159-165, September **2015** (ISSN: 1598-2645, Ack: MCST-KOCCA-CT2015)

Min-Gwan Seo, **Jaesung Lee**, and Dae-Won Kim,
Effective Robot Path Planning Method based on Fast Convergence Genetic Algorithm,
Journal of The Korea Society of Computer and Information,
유전자 알고리즘의 수렴 속도 향상을 통한 효과적인 로봇 길 찾기 알고리즘, 한국컴퓨터정보학회논문지, 한국컴퓨터정보학회
20(4):25-32, April **2015** (ISSN: 1598-849X, Ack: NRF-2014R1A1A2059032)

Jeonghun Yoon, **Jaesung Lee**, and Dae-Won Kim,
Feature Selection in Multi-label Classification using NSGA-II Algorithm,
Journal of Korean Institute of Information Scientists and Engineers: Software and Applications,
NSGA-II 알고리즘을 이용한 다중 레이블 분류 문제에서 특징 선별, 정보과학회논문지, 한국정보과학회
40(3):133-140, March **2013** (ISSN: 2383-630X)

Jaesung Lee, Jinhyuk Jo, Jae-Joon Lee, and Dae-Won Kim,
SYMMER: A Systematic Approach to Multiple Musical Emotion Recognition,
International Journal of Fuzzy Logic and Intelligent Systems,
11(2):124-128, June **2011** (ISSN: 1598-2645, Ack: NRF-2010-0012885)

Hyunki Lim, **Jaesung Lee**, Song Ko, and Dae-Won Kim,
An Estimation Algorithm of Cluster Volume for GK Clustering,
The Journal of Korean Institute of Information Technology,
GK 클러스터링 향상을 위한 클러스터 볼륨 추정 알고리즘, 한국정보기술학회논문집, 한국정보기술학회
9(3):181-187, March **2011** (Ack: NRF-2010-0012885)

Jaesung Lee, Bo-Yeong Kang, and Dae-Won Kim,
Prediction system based on the evidence for Dental Caries,
The Journal of Korean Institute of Information Technology,
증거 기반 치아-우식 예측 시스템, 한국정보기술학회논문집, 한국정보기술학회
9(2):207-213, March **2011** (Ack: NRF-2009-0068718, NRF-2009-0064861)

Jaesung Lee and Dae-Won Kim,
Improving Classification Performance for Data with Numeric and Categorical Attributes using Feature Wrapping,
Journal of Korean Institute of Information Scientists and Engineers: Software and Applications,
특징 래핑을 통한 숫자형 특징과 범주형 특징이 혼합된 데이터의 클래스 분류 성능 향상 기법, 정보과학회논문지, 한국정보과학회
36(12):1024-1027, December **2009** (Ack: NRF-2009-0068718)

Jaesung Lee and Dae-Won Kim,
Removing Non-Informative Features by Robust Feature Wrapping Method for Microarray Gene Expression Data,
Journal of Korean Institute of Information Scientists and Engineers: Software and Applications,
유전자 알고리즘과 Feature Wrapping 을 통한 마이크로레이 데이터 중복 특징 소거법, 정보과학회논문지, 한국정보과학회
35(8):463-478, August **2008** (ISSN: 1598-849X)

G.2. Published from Domestic Journals

Jaesung Lee,
Understanding of Deep Neural Network,
Information and Communication Magazine,
심층 신경망의 발전 과정과 이해, 정보와 통신, 한국통신학회
33(10):40-48, October **2016** (ISSN: 1226-4725, Ack: NRF-2016R1C1B1014774)

G.3. Published from Domestic Conferences

Wangduk Seo, **Jaesung Lee**, Hyunki Lim, and Dae-Won Kim,
Quadratic Programming-based Feature Selection for Music Style Classification,
음악 스타일 분류 성능 향상을 위한 이차계획법 기반 특징 선별 기술, 한국멀티미디어학회 학술발표논문집
The KMMS Autumn Conf., 19(2):1123-1126, Pusan, Korea, October **2016** (Seoul-Accord-R0613-16-1205)

Sunghyeon Hong, **Jaesung Lee**, Hyunki Lim, and Dae-Won Kim,
A Memetic Algorithm for Travelling Salesman Problem,
외판원 문제를 위한 미미틱 알고리즘, 한국멀티미디어학회 학술발표논문집
The KMMS Autumn Conf., 19(2):1127-1130, Pusan Korea, October **2016** (Seoul-Accord-R0613-16-1205)

Jaesung Lee, and Dae-Won Kim,
Robust Music Categorization Method using Social Tags,
소셜 태그를 이용한 강인한 음악 분류 기법, 한국컴퓨터정보학회 학술발표논문집 23(1)
The KSCI Winter Conf., 23(1):181-182, Cheongju, Korea, January **2015** (MCST-KOCCA-CT2014)

Min-Gwan Seo, **Jaesung Lee**, and Dae-Won Kim,
A Fast Convergence Genetic Algorithm for Robot Path Planning,
로봇 경로 탐색을 위한 빠르게 수렴하는 유전자 알고리즘, 한국컴퓨터정보학회 학술발표논문집 23(1)
The KSCI Winter Conf., 23(1):31-34, Cheongju, Korea, January **2015** (NRF-2014R1A1A2059032)

Jeongbong Seo, **Jaesung Lee**, Jinhyuk Jo, Jae-Joon Lee, and Dae-Won Kim,
Temporal Data Gathering for Music Recommend System based on Korean Emotion,
한국형 정서-음악 추천 시스템(MUSAI)을 위한 시계열 데이터 수집 연구, 한국 HCI 학회 학술대회
HCI Korea 2011, pp. 34-37, Pyeongchang, Korea, January **2011** (NRF-2010-0012885)

Jinhyuk Jo, **Jaesung Lee**, Jae-Joon Lee, and Dae-Won Kim,
Domestic Music Genre Classification based on Feature Wrapper,
특징 감싸기 기법을 활용한 국내 음악 장르 분류 성능의 향상, 한국정보과학회 학술발표논문집 36(2C)
Proc. KIIS Autumn Conf., 36(2C):418-421, November **2009**

Jaesung Lee and Dae-Won Kim,
Linear Search based Feature Wrapping Method for Microarray Gene Expression Data,
선형 검색 기반의 Feature Wrapping 을 통한 마이크로어레이 데이터 특징 추출 기법, 한국정보과학회 학술발표논문집 35(2C)
Proc. KIIS Autumn Conf., 35(2C):158-161, October **2008**.

Jaesung Lee and Dae-Won Kim,
A Fast Feature Selection Technique for Microarray Data,
마이크로어레이 데이터 분석을 위한 선형 특징 선별 기법, 한국지능시스템학회 학술발표 논문집 18(1)
Proc. KIIS Spring Conf., 18(1):188-189, April **2008**.

Jaesung Lee and Dae-Won Kim,
Removing Non-Informative Features Weakening of Class Separability,
클래스 구분력이 없는 특징 소거법, 한국지능시스템학회 학술발표 논문집 17(2)
Proc. KFIS Autumn Conf., 17(2):59-62, November **2007**.

Jaesung Lee and Dae-Won Kim,
Expansion Clustering for Initialized Set,
초기 클러스터를 위한 확장 클러스터링, 한국지능시스템학회 학술발표 논문집 16(2)
Proc. KFIS Autumn Conf., 16(2):79-82, Gumi, Korea, November **2006**.

H. Working papers

H.1. Submitted papers

Hyunki Lim, **Jaesung Lee**, and Dae-Won Kim,
Optimization Approach for Feature Selection in Multi-label Classification
Submitted, 28 July **2016**

H.2. In preparation

Jaesung Lee and Dae-Won Kim,
MARS: Multi-label Feature Selection based on Entropy Approximation with Restricted Variable Subsets

Jaesung Lee and Dae-Won Kim,
Cheap Multi-label Feature Selection

Jaesung Lee and Dae-Won Kim,
Multi-label Naïve Bayes Classifier considering Label Dependency

Miao Xu, **Jaesung Lee**, and Bo-Yeong Kang
Coverage Path Planning for Cleaning Robot using Dynamic Decomposition Method

I. Patents

I.1. Registered Patent

Dae-Won Kim, **Jaesung Lee**, and Hyunki Lim,
Method and Apparatus for selecting feature used to classify multi-label,
다중 레이블을 분류하기 위해 이용되는 특징 셋의 선택 방법 및 장치
Code: 10-1656604, **Korea**, 5 September **2016**

Dae-Won Kim, **Jaesung Lee**, and Hyunki Lim,
Apparatus and Method for accelerating multi-label feature selection based on low-rank approximation
근사치를 이용한 다중 레이블 특징 선별 가속화 장치 및 방법
Code: 10-1638114, **Korea**, 4 July **2016**
Technology Transfer (Creamsoft), Contract Period: 2015.12.14. – 2019.12.31.

Dae-Won Kim, **Jaesung Lee**, and Bo-Yeong Kang,
Apparatus and Method for pronunciation training for beginners of foreign language learning
외국어 교육의 초보자를 위한 발음 학습 장치 및 방법
Code: 10-1637843, **Korea**, 1 July **2016**

Dae-Won Kim, **Jaesung Lee**, and Bo-Yeong Kang,
Method and Apparatus for path search
경로 탐색 방법 및 그 장치
Code: 10-1620145, **Korea**, 3 May **2016**

Dae-Won Kim, **Jaesung Lee**, and Jong-Hoon Chae
Method and Apparatus for determining predictive tag value each of a plurality of music tag for generating mapping function of music
음악에 대한 사상 함수를 생성하기 위한 복수의 음악 태그 각각의 예측 태그값 결정 방법 및 장치
Code: 10-1593337, **Korea**, 2 February **2016**
Technology Transfer (Creamsoft), Contract Period: 2015.02.05. – 2019.02.28.

Dae-Won Kim, **Jaesung Lee**, and Min-Gwan Seo,
Apparatus and Method for planning robot path using genetic algorithm,
유전자 알고리즘을 이용한 로봇 경로 탐색 장치 및 방법
Code: 10-1585374, **Korea**, 7 January **2016**

Dae-Won Kim, **Jaesung Lee**, and Jong-Hoon Chae,
Method and apparatus for providing music retrieval service based on tag combination using prototypical music content
전형적 음악 콘텐츠를 이용한 태그 조합 기반 음악 검색 서비스 제공 방법 및 장치
Code: 10-1564534, **Korea**, 23 October **2015**

Dae-Won Kim, **Jaesung Lee**, Hyunki Lim, and Jeongbong Seo,
Pattern recognition method and apparatus within terminal
사용자 단말에서의 패턴 인식 방법 및 그 장치
Code: 10-1551122, **Korea**, 1 September **2015**

Dae-Won Kim, **Jaesung Lee**, Jinhyuk Jo, Hyunki Lim, Jong-Hoon Chae, and Jae-Joon Lee,
Method and apparatus for multiple meaning classification related music
음악에 대한 복합 의미 인식 방법 및 그 장치
Code: 10-1520572, **Korea**, 8 May **2015**

I.2. Pending Patent

Dae-Won Kim, and **Jaesung Lee**
Method and Apparatus for selecting an optimal feature in classifying multi-label pattern, Apparatus for classifying multi-category document,
Code: 10-2016-0004976, **Korea**, 14 January **2016**

Dae-Won Kim, **Jaesung Lee**, Bo-Yeong Kang, and Jinhyuk Jo,
English pronunciation training Method and Apparatus
Code: 10-2014-0180297, **Korea**, 15 December **2014**

J. Projects

- 2016 - Date Inter-cultural Korean Music Discovery based on Pluralistic Music Emotion, NRF
다원주의적 음악감성 기반 문화호환적인 한국형 음악 발굴 연구, 미래창조과학부(한국연구재단)
Role: Principal Investigator (Ack code: **NRF-2016R1C1B1014774**)
- 2014 - Date Techniques for multi-perceptual contents based on aesthetic synchronization, KOCCA
다중 감각형 콘텐츠 제작을 위한 영상 및 음악의 심미적 동기화 기술 개발, 문화체육관광부(한국콘텐츠진흥원)
Role: Project Leader (Ack code: **MCST-KOCCA-CT2015**)
- 2014 - 2016 Music Map: Investigating Relation of Meta Information for Music Recommendation, NRF
뮤직 맵: 메타 정보 상관성 도출 및 시각화 기술을 이용한 음악 추천 서비스 개발, 교육부(한국연구재단)
Role: Principal Investigator (Ack code: **NRF-2014R1A1A2059032**)
- 2013 - 2016 Next Generation Big Data Research Team, BK21PLUS Project, NRF
차세대 빅데이터 전문인력 양성사업(팀), 교육부(한국연구재단)
Role: Research Professor
- 2013 - 2014 Aesthetic Cognition-Emotion Inference for Personalized Music Service, NRF
개인화 음악서비스를 위한 심미적 인지-정서 추론 기술, 교육부(한국연구재단)
Role: Research Assistant (Ack code: **NRF-2013R1A1A2A10005255**)
- 2010 - 2013 Korean Situation-Context-Emotion based Music Recommendation System, NRF
상황맥락 정서 기반 한국형 음악 추천 시스템 개발, 교육과학기술부(한국연구재단)
Role: Project Leader (Ack code: **NRF-2010-0012885**)
- 2010 - 2011 Next-generation Clinical Text Search Platform based on Ontology Building of Electronic Medical Records, NRF
병원의무기록문서로부터 임상지식 온톨로지화에 기반한 차세대 임상 문서 검색 시스템 구축, 교육과학기술부(한국연구재단)
Role: Research Assistant
- 2010 - 2011 Techno-Culture through Interactions between Computer Science and Aesthetics
컴퓨터과학, 공학에 미학의 체계적 적용 가능성에 관한 연구 - 심미적 컴퓨팅의 범례를 중심으로, 교육과학기술부(한국연구재단)
Role: Research Assistant
- 2009 - 2011 Improving Diagnosis Accuracy for Biomedical Data, Seoul Government
임상 정보 데이터에 대한 질병 진단 정확도 향상, 서울특별시(서울장학재단)
Role: Principal Investigator
- 2009 - 2011 Stroke Prognosis Prediction Techniques using Temporal Clinical Data, NRF
시계열 임상데이터를 활용한 뇌졸중 예후 예측 기술, 교육과학기술부(한국연구재단)
Role: Project Leader (Acknowledgment code: **NRF-2009-0068718**)
- 2008 - 2009 Imbalanced Bio-Data specified Feature Extraction Method, KOSAF
불균형 바이오 데이터를 위한 특징 추출 방법 연구, 교육과학기술부(한국장학재단)
Role: Principal Investigator
- 2007 - 2009 Software Development Track, MKE
소프트웨어 개발 트랙, 지식경제부(정보통신산업진흥원)
Role: Research Assistant

K. Honors and Awards

- 2013 Chung-Ang University Excellence in Research Award 2012
- 2009 Chung-Ang University Research Assistant (A)
Acknowledgment code: **CAU-RSG-2009**
- 2009 Seoul Fellowship
- 2008 Korea Student Aid Foundation Scholarship
- 2008 Chung-Ang University Scholarship
Acknowledgment code: **CAU-RSG-2008**

L. Google Scholar

URL <https://scholar.google.co.kr/citations?user=WgfyWHkAAAAJ&hl=en>

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M. Invited Talks

- 2016 Tutorial: Deep learning and its current trends
Summer Workshop on Computer Communications, August 22-23, Hongcheon, Korea
- 2016 Introduction to machine learning and deep learning
Future Network Series, September 26, Seoul, Korea