Curriculum Vitae

Heuiseok Lim

PERSONAL DATA

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E-mail: limhseok@korea.ac.kr

Work Address:

- 311 Aegineung Student Center, Korea University, 145 Anam-ro, Seongbuk-gu, Seoul, Korea

Present Position:

- Professor, Dept. of Computer Science and Engineering, College of Informatics, Korea University
- Head Director, Human-inspired AI Research, Korea University

ACADEMIC POSITIONS

2020-Present Chief Director, Human-inspired AI Research, Korea University, Korea

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

2011-2012 Visiting Scholar, Dept. of Computer Science, Univ. of Colorado Boulder, USA

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

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

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

Artificial Intelligence & Machine Learning

Brain-Computer Interface

Computer Science Education

Information Retrieval

Publications

I have published more than 500 papers of international journals and international conferences. Please refer to Google Scholar for Heuiseok Lim (Link)

Representative Publications

From 2023 to 2025, 39 papers have appeared in leading AI/NLP conferences, all with me serving as corresponding author.
ACL ×9 · EMNLP ×21 · NAACL ×4 · COLING ×3 · ICLR ×1 · EACL ×1

2025

Metric Calculating Benchmark: Code-Verifiable Complicate Instruction Following Benchmark for Large Language Models. *EMNLP 2025.*
Hyeonseok Moon, Seongtae Hong, Jaehyung Seo, ***Heuiseok Lim***

Semantic Inversion, Identical Replies: Revisiting Negation Blindness in Large Language Models. *EMNLP 2025.*
Jinsung Kim, Seonmin Koo, ***Heuiseok Lim***

Benchmark Profiling: Mechanistic Diagnosis of LLM Benchmarks. *EMNLP 2025.*
Dongjun Kim, Gyuho Shim, Yongchan Chun, Minhyuk Kim, Chanjun Park, ***Heuiseok Lim***

TORSO: Template-Oriented Reasoning Towards General Tasks. *EMNLP 2025.*
Minhyuk Kim, Seungyoon Lee, ***Heuiseok Lim***

Mixture-of-Clustered-Experts: Advancing Expert Specialization and Generalization in Instruction Tuning. *EMNLP 2025.*
Sugyeong Eo, Jung Jun Lee, Chanjun Park, ***Heuiseok Lim***

MultiDocFusion: Hierarchical and Multimodal Chunking Pipeline for Enhanced RAG on Long Industrial Documents. *EMNLP 2025.*
Joongmin Shin, Chanjun Park, Jeongbae Park, Jaehyung Seo, ***Heuiseok Lim***

The Impact of Negated Text on Hallucination with Large Language Models. *EMNLP 2025.*
Jaehyung Seo, Hyeonseok Moon, ***Heuiseok Lim***

KoLEG: On-the-Fly Korean Legal Knowledge Editing with Continuous Retrieval. *EMNLP 2025-findings.*
Jaehyung Seo, Dahyun Jung, Jaewook Lee, Yongchan Chun, Dongjun Kim, Hwijung Ryu, Donghoon Shin, ***Heuiseok Lim***

StepKE: Stepwise Knowledge Editing for Multi-Hop Question Answering. *EMNLP 2025-findings.*
Jaewook Lee, Dahyun Jung, ***Heuiseok Lim***

HAWK: Highlighting Entity-aware Knowledge for Alleviating Information Sparsity in Long Contexts. *EMNLP 2025-findings.*
Seonmin Koo, Jinsung Kim, Chanjun Park, ***Heuiseok Lim***

LimaCost: Data Valuation for Instruction Tuning of Large Language Models. *EMNLP 2025-findings.*
Hyeonseok Moon, Jaehyung Seo, Seonmin Koo, Jinsung Kim, Young-kyoung Ham, Jiwon Moon, ***Heuiseok Lim***

Call for Rigor in Reporting Quality of Instruction Tuning Data. *ACL 2025.*
Hyeonseok Moon, Jaehyung Seo, ***Heuiseok Lim***

Cross-Lingual Optimization for Language Transfer in Large Language Models. *ACL 2025.*
Jungseob Lee, Seongtae Hong, Hyeonseok Moon, ***Heuiseok Lim***

Semantic Aware Linear Transfer by Recycling Pre-trained Language Models for Cross-lingual Transfer. *ACL 2025-findings.*
Seungyoon Lee, Seongtae Hong, Hyeonseok Moon, ***Heuiseok Lim***

Enhancing Automatic Term Extraction with Large Language Models via Syntactic Retrieval. *ACL 2025-findings.*
Yongchan Chun, Minhyuk Kim, Dongjun Kim, Chanjun Park, ***Heuiseok Lim***

REVISE: A Framework for Revising OCRed text in Practical Information Systems with Data Contamination Strategy. *ACL 2025-Industry.*
Gyuho Shim, Seongtae Hong, ***Heuiseok Lim***

K-HALU: Multiple Answer Korean Hallucination Benchmark for Large Language Models. *ICLR 2025.*
Jaehyung Seo, ***Heuiseok Lim***

CoME: An Unlearning-based Approach to Conflict-free Model Editing. *NAACL 2025.*
Dahyun Jung, Jaehyung Seo, Jaewook Lee, Chanjun Park, ***Heuiseok Lim***

MIRAGE: A Metric-Intensive Benchmark for Retrieval-Augmented Generation Evaluation. *NAACL 2025-findings.*
Chanhee Park, Hyeonseok Moon, Chanjun Park, ***Heuiseok Lim***

FLEX: A Benchmark for Evaluating Robustness of Fairness in Large Language Models. *NAACL 2025-findings.*
Dahyun Jung, Seungyoon Lee, Hyeonseok Moon, Chanjun Park, ***Heuiseok Lim***

Find the Intention of Instruction: Comprehensive Evaluation of Instruction Understanding for Large Language Models. *NAACL 2025-findings.*
Hyeonseok Moon, Jaehyung Seo, Seungyoon Lee, Chanjun Park, ***Heuiseok Lim***

MIGRATE: Cross-Lingual Adaptation of Domain-Specific LLMs through Code-Switching and Embedding Transfer. *COLING 2025.*
Seongtae Hong, Seungyoon Lee, Hyeonseok Moon, ***Heuiseok Lim***

2024

An analysis on language transfer of pre-trained language model with cross-lingual post-training. *Expert Systems with Applications, 2024.*
Suhyune Son, Chanjun Park, Jungseob Lee, Midan Shim, Chanhee Lee, Yoonna Jang, Jaehyung Seo, Jungwoo Lim, ***Heuiseok Lim***

PANDA: Persona Attributes Navigation for Detecting and Alleviating Overuse Problem in Large Language Models. *EMNLP 2024.*
Jinsung Kim, Seonmin Koo, ***Heuiseok Lim***

Where am I? Large Language Models Wandering between Semantics and Structures in Long Contexts. *EMNLP 2024.*
Seonmin Koo, Jinsung Kim, YoungJoon Jang, Chanjun Park, ***Heuiseok Lim***

Search if you don't know! Knowledge-Augmented Korean Grammatical Error Correction with Large Language Models. *EMNLP 2024-findings.*
Seonmin Koo, Jinsung Kim, Chanjun Park, ***Heuiseok Lim***

Translation of Multifaceted Data without Re-Training of Machine Translation Systems. *EMNLP 2024-findings.*
Hyeonseok Moon, Seungyoon Lee, Seongtae Hong, Seungjun Lee, Chanjun Park, ***Heuiseok Lim***

Revisiting Under-Represented Knowledge of Latin American Literature in Large Language Models. *ECAI 2024.*
Jinsung Kim, Seonmin Koo, ***Heuiseok Lim***

Length-aware Byte Pair Encoding for Mitigating Over-segmentation in Korean Machine Translation. *ACL 2024-findings.*
Jungseob Lee, Hyeonseok Moon, Seungjun Lee, Chanjun Park, Sugyeong Eo, Hyunwoong Ko, Jaehyung Seo, Seungyoon Lee, ***Heuiseok Lim***

Towards Precise Localization of Critical Errors in Machine Translation. *ACL 2024-findings.*
Dahyun Jung, Sugyeong Eo, ***Heuiseok Lim***

KoCommonGEN v2: A Benchmark for Navigating Korean Commonsense Reasoning Challenges in Large Language Models. *ACL 2024-findings.*
Jaehyung Seo, Jaewook Lee, Chanjun Park, Seongtae Hong, Seungjun Lee, ***Heuiseok Lim***

Detecting Critical Errors Considering Cross-Cultural Factors in English-Korean Translation. *LREC-COLING 2024.*
Sugyeong Eo, Jungwoo Lim, Chanjun Park, Dahyun Jung, Seonmin Koo, Hyeonseok Moon, Jaehyung Seo, ***Heuiseok Lim***

Leveraging Pre-existing Resources for Data-Efficient Counter-Narrative Generation in Korean. *LREC-COLING 2024.*
Seungyoon Lee, Chanjun Park, DaHyun Jung, Hyeonseok Moon, Jaehyung Seo, Sugyeong Eo, ***Heuiseok Lim***

Ask, Assess, and Refine: Rectifying Factual Consistency and Hallucination in LLMs with Metric-Guided Feedback Learning. *EACL 2024.*
Dongyub Lee, Eunhwan Park, Hodong Lee, ***Heuiseok Lim***

Hyper-BTS Dataset: Scalability and Enhanced Analysis of Back TranScription (BTS) for ASR Post-Processing. *EACL 2024-findings.*
Chanjun Park, Jaehyung Seo, Seolhwa Lee, Junyoung Son, Hyeonseok Moon, Sugyeong Eo, Chanhee Lee, ***Heuiseok Lim***

Generative Interpretation: Toward Human-Like Evaluation for Educational Question-Answer Pair Generation.
EACL 2024-findings.
Hyeonseok Moon, Sugyeong Eo, Chanjun Park, Jaehyung Seo, ***Heuiseok Lim***

2023

KEBAP: Korean Error Explainable Benchmark Dataset for ASR and Post-processing. *EMNLP 2023.*
Seonmin Koo, Chanjun Park, Jinsung Kim, Jaehyung Seo, Sugyeong Eo, Hyeonseok Moon, ***Heui-Seok Lim***

CHEF in the Language Kitchen: A Generative Data Augmentation Leveraging Korean Morpheme Ingredients.
EMNLP 2023.
Jaehyung Seo, Hyeonseok Moon, Jaewook Lee, Sugyeong Eo, Chanjun Park, ***Heui-Seok Lim***

Post-hoc Utterance Refining Method by Entity Mining for Faithful Knowledge Grounded Conversations. *EMNLP 2023.*
Yoonna Jang, Suhyune Son, Jeongwoo Lee, Junyoung Son, Yuna Hur, Jungwoo Lim, Hyeonseok Moon, Kisu Yang, ***Heui-Seok Lim***

CReTIHC: Designing Causal Reasoning Tasks about Temporal Interventions and Hallucinated Confoundings.
EMNLP 2023-findings.
Changwoo Chun, SongEun Lee, Jaehyung Seo, ***Heui-Seok Lim***

Beyond Candidates: Adaptive Dialogue Agent Utilizing Persona and Knowledge. *EMNLP 2023-findings.*
Jungwoo Lim, Myunghoon Kang, Jinsung Kim, Jeongwook Kim, Yuna Hur, ***Heui-Seok Lim***

Explore the Way: Exploring Reasoning Path by Bridging Entities for Effective Cross-Document Relation Extraction. *EMNLP 2023-findings.*
Junyoung Son, Jinsung Kim, Jungwoo Lim, Yoonna Jang, ***Heui-Seok Lim***

Doubts on the reliability of parallel corpus filtering. *Expert Systems with Applications, 2023.*
Hyeonseok Moon, Chanjun Park, Seonmin Koo, Jungseob Lee, Seungjun Lee, Jaehyung Seo, Sugyeong Eo, Yoonna Jang, Hyunjoong Kim, Hyoung-gyu Lee, ***Heuiseok Lim***

Towards Diverse and Effective Question-Answer Pair Generation from Children storybooks. *ACL 2023-findings.*
Sugyeong Eo, Hyeonseok Moon, Jinsung Kim, Yuna Hur, Jeongwook Kim, SongEun Lee, Changwoo Chun, Sungsoo Park, ***Heuiseok Lim***

PEEP Talk: A Situational Dialogue-based Chatbot for English Education. *ACL 2023-findings.*
Seungjun Lee, Yoonna Jang, Chanjun Park, Jungseob Lee, Jaehyung Seo, Hyeonseok Moon, Sugyeong Eo, Seounghoon Lee, Bernardo Yahya, ***Heuiseok Lim***

Award and Honors

Top 100 Outstanding National Research and Development Achievements of 2025

Awarded the Minister of SMEs and Startups' Citation in 2025

Selected as a Member of the K-AI Model Development Team, 2025

Korea University Alumni Association Academic Award (Natural Sciences and Engineering Division), 2025

Korea University Hall of Fame - Outstanding Researcher Award, 2025
Best Paper Award, The 37th Annual Conference on Human and Cognitive Language Technology (HCLT), 2025
Excellent Paper Award, The 37th Annual Conference on Human and Cognitive Language Technology (HCLT), 2025
Seoktop Technology Award (Top 1%), Korea University, 2025
Best Paper Award, The 36th Annual Conference on Human and Cognitive Language Technology (HCLT), 2024
Excellent Paper Award, The 36th Annual Conference on Human and Cognitive Language Technology (HCLT), 2024 (4 papers)
Excellence Award, Competition for best practices of industry-academia cooperation, Ministry of Education, 2024
Seoktop Technology Award(Top 1%), Korea University, 2024
Best Paper Award, The 35th Annual Conference on Human and Cognitive Language Technology (HCLT), 2023
Ministry of Science and ICT Award, ICT Challenge 2023
Seoktop Technology Award(Top 1%), Korea University, 2023
Ministry of Science and ICT Award, ICT Challenge, 2022
Seoktop Technology Award, Korea University, 2022
Excellence Award, Competition for best practices of industry-academia cooperation, Ministry of Education, 2021
Best Paper Award, the 33th Annual Conference on Human and Cognitive Language Technology (HCLT), 2021
Seoktop Technology Award, Korea University(Top 1%), 2021
Institute for Information & communication Technology Planning & evaluation IITP Award, ICT Colloquium, 2020
Seoktop Technology Award(Top 1%), Korea University, 2020
The Research Grant, The Okawa Foundation for Information and Telecommunications, 2020
Grand Award, AI for Accessibility Hackathon, Microsoft Korea, 2019
Grand Award, ITRC Global Makeathon, Ministry of Science and ICT, 2019
Best Paper Award, the 31th Annual Conference on Human and Cognitive Language Technology (HCLT), 2019
Participation Prize, Korean Language Information Processing System Competition, Korean Institute of Information Scientists and Engineers, 2019
Bronze Prize, Korean Language Information Processing System Competition, Korean Institute of Information Scientists and Engineers, 2018
Excellence Award, Samsung AI Forum, 2018
Gold Prize, Korean Language Information Processing System Competition, Korean Institute of Information Scientists and Engineers, 2017
Best Paper Award, The Korea Convergence Society, 2012
Achievement Award, Korea Society for Internet Information, 2012
Researcher Award, KAIS(Korea Academia-Industrial cooperation Society), 2009

Books and Book chapters

2023. 05 Natural Language Processing Bible - Principles of ChatGPT
2019. 12 Natural Language Processing Bible - Theory, Applied System, Deep Learning
2017. 03 Computational Thinking for Novice
2011.09 Search Engine: Information Retrieval in Practice

2010.08 Please help! We've got the iPhone 4

2010.05 Please help! We've got the iPhone 3

2010.03 Data Structures and Algorithm Analysis in C++

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

COMMITTEES

2022.10 The 1st Workshop on Customized Chat Grounding Persona and Knowledge(COLING 2022), Workshop Chair

2018.03 ~ 2023.02 The International Conference on Interdisciplinary research on Computer Science, Psychology and Education (ICICPE), General Chair

2015.07 The 5th International Conference on Convergence Technology, Program Committee

2013.07~2014.07 The International Conference on Convergence Technology, Program Chair

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

2011.03 ~ 2011.12 International Conference on Internet, 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, Workshop Chair

2009.03 ~ 2009.12 International Conference on Internet, 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

TEACHING

Machine Learning & Natural Language Processing

The lecture was for the theory and practice from basic to advanced machine learning and natural language processing.

AI-ML-Deep Learning based NLP

This course is a practical lecture on the theory of AI / ML / DL of natural language processing and the recent techniques of the paper.

Based on natural language processing and deep learning

Core theories and analysis methodologies needed to solve problems by leading AI and Big Data projects.

AI/ML/DL & NLP

The basics of AI / ML / DL application of natural language processing and how they are applied to real life.

Natural Language Processing and Language Intelligence Basic Curriculum

The basics of Deep Learning technology for natural language processing along while focusing on recent research.

AI Machine Learning Basic Curriculum

This curriculum consists of the basic theories of machine learning, machine learning tool kit learning, and practical examples for practical application.

Natural Language Processing Applications
Covers the basics of Deep Learning technology for natural language processing along while focusing on recent research papers to understand latest trends in advanced technology.

Educational Data Mining
Review the current techniques for educational data mining. Understanding fundamental principles of educational data mining and its applications.

Information Retrieval
This class covers basic theories of information retrieval and techniques to implement a practical information retrieval engine. The topics are information retrieval models, text processing techniques, indexing techniques, information theories, and applications of IR, which are vital to data mining and big data analysis.

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

Patents

International Patent(registration)
Device and method for extracting dialogue-based relation extraction based on utterance-level computation over graph structure. *USA. 2026*
Method for generating training data and method for post-processing of speech recognition using the same. *USA. 2025*

International Patent
Device and method for automated moving image subtitle generation. *PCT. 2025*
Device and method of post-hoc utterance refining by entity mining for faithful knowledge grounded conversations. *USA. 2024*
Device and method for generation of diverse question-answer pair. *USA. 2024*
Device and method for extracting dialogue-based relation using cloze-style masking with prompts for entity types and relational information. *PCT. 2023*
Method and device for determining similarity of programming codes based on cross-validation ensemble and filtering strategy. *USA. 2023*
Dialogue performing system, apparatus and method thereof. *PCT. 2021*
Apparatus, method and system for determining answer regarding question. *PCT. 2021*
Method of building training data of machine translation. *PCT. 2020*
Apparatus and method for providing changeable controller user interface based of user information and contents attribute. *PCT. 2017*
System for mining biometric data to predict programmer expertise and task difficulty. *PCT. 2017*

Domestic Patent(registration)
Device and method for extracting dialogue-based relation extraction based on utterance-level computation over graph structure, 2025
Device and method for generating Korean commonsense reasoning dataset, 2025
Device and method of post-hoc utterance refining by entity mining for faithful knowledge grounded conversations, 2025
Apparatus of obtaining response based on semantic similarity and method thereof, 2025
Device and method for generating fortune telling model based on conditional generation deep-learning, 2025

Task decomposition method based prediction of return on advertising spend and device performing the same, 2025
Apparatus of generating query and method thereof, 2025
Korean relation extraction model and method with entity positon information, 2024
Method and device of code similarity judgment of programming languages based on cross-validated ensemble and filtering strategy, 2024
Pet service recommending electronic apparatus and recommending method therefor based on 2-filtering, 2024
Device and method for generating optimal translation subtitle using quality estimation, 2024
Named entity recognition apparatus and method thereof, 2024
Device and method for constructing dataset in Korean document-level relation extraction, 2024
Device and method for parallel corpus filtering based on semantic similarity, 2023
Device and method for generating of training data for quality estimation in machine translation, 2023
Apparatus and method for generating language based on commonsense reasoning, 2023
Appratus for corpus processing, apparatus and method and machine translation, 2023
Method for generating training data and method for post-processing of speech recognition using the same, 2023
Noise canceling device for companion animal and method using same, 2023
Apparatus, method and system for determining answer regarding question, 2023
Generating method of model measuring document similarity and measuring method for document similarity using the same, 2023
Dialogue performing system, apparatus and method thereof, 2023
Apparatus and method for outputting image corresponding to language, 2023
Device and method for correcting Korean spelling 2022
Method of translating ancient Korean using machine translation 2022
Method of building training data of machine translation 2022
Correction performance evaluation metrics of neural network machine translation and method of constructing the same, 2022
Device and method for automatic fake news detection, 2021
Appratus, method and system for processing dialogue with regard to image, 2021
Device for automatic question answering, 2021
Method and apparatus for modeling based on cognitive response of smart senior, 2020
Device and method for providing personalized UX/UI service for broadcast standard, 2019
Method and apparatus for sharing experience based on internet of things, 2018
Method and apparatus for mediation of food delivery, 2018
Method and apparatus for spotting fake news using collective intelligence, 2018
Customized screening method and apparatus using collective emotions, 2018
Smart chair based on IoT and method of analysis of seated posture, apparatus and method for managing smart chair, 2018
Method and apparatus for managing loan based on the internet of things, 2017
Smart flowerpot based on internet of thing and management system for the same, 2017
System for judging attention concentration of online learning and method the same, 2017
Method for composing automatically to humanities data, 2017
Method and apparatus for interpretation of dreams by using collective intelligence, 2017
System and method for a learning course automatic generation, 2017
Method for developing based on user's participating, 2017
Method for intelligent learning managing, 2017
Mento recommend method using electronic desk, 2016
Cognitive abilities measurement apparatus and cognitive abilities measurement method, 2013

System and method for studying foreign language based on cognitive function of learners, 2012
Diagnosis system and method of cognitive function for foreign language learners, 2012
System and method for performing learning challenges for foreign language learners, 2011
System of generating intelligent end word based on realistic language using aspect, 2011
Apparatus for diagnosing anomia, 2008

Domestic Patent(Filed)

Device and method for deep research-specialized question-answering using search determination and iterative generation, 2025
Device and method for multi-language execution and verification of code, 2025
apparatus and method for constructing a search pool for high-difficulty korean-language search evaluation, 2025
Device and method for cross-lingual adaptation of domain-specific llms through code-switching and embedding transfer, 2025
Device and method for embedding model for korean-specific retrieval, 2025
Device and method for a language transfer using embeddings from pretrained language models, 2025
Emotional validation alignment method and apparatus for empathetic utterance generation in large language models, 2025
Device and method for automatic correction and structuring of ocr-degraded text extracted from documents, 2025
Method and device for database retrieval augmented generation leveraging large reasoning language models and schema linking methods, 2025
Device and method for evaluating retrieval-augmented generation systems, 2025
Device and method for logn-context question-answering using entity-aware knowledge emphasis, 2025
Device and method of unlearning-based model modification for mitigating knowledge conflicts, 2025
Method and apparatus for question answering based on multi-table, 2025
Device and method for automatic evaluation of call center agent conversation, 2025
Method for improving reasoning ability of large language models via feature steering, 2025
Styledfs based document chunking, 2025
Device and method of generating atuomatic speech translation model for translating english speech to korean text, 2025
Device and method of knowledge graph based editing for multi-hop question answering, 2025
Device and method for detecting negation blindness in large language models, 2025
Device and method for confidence-based efficient multiagent collaboration, 2025
Device and method for document chunking and device and method for question-answering using the same, 2025
Device and method for automated moving image subtitle generation, 2025
Cluster-based mixture-of-experts training system, 2024
Method for extracting programming capability in large language models, 2024
Device and method of generating domain-specific automatic speech recognition model, 2024
Self-referential assessment method for generative commonsense causal reasoning, 2024
Device and method for identifying detailed errors in machine translation, 2024
Performance evaluation method for large language models based on intention catching capability, 2024
External knowlege-enhanced device and method for korean grammatical error correction, 2024
Device and method for detecting persona overuse problem in conversational situations, 2024
Device and method of providing mental healthcare service for older people, 2023
Device and method of predicting cognitive function and psychological distress using autobiographical memory, 2023
Device and method for generating Korean commonsense knowledge graph using large language model, 2023
Device and method for generation using super in-context learning, 2023
Device and method for image-text retrieval based on contrastive language-image pre-training-adapter, 2023

Language model generating method by reinforcement learning from human feedback without human labor, 2023
Device and method for synonyms/antonyms-based data augmentation for training Toeic problems solving model, 2023
Device and method for Korean data augmentation based on contrastive learning and morpheme combination, 2023
Device and method for explainable fake news detection using question answer pair generation, 2023
Device and method for persona-knowledge grounded dialogue for candidate-free situation, 2023
Device and method for constructing a dataset to detect critical errors in machine translation, 2023
Device and method for assessment of educational question-answering, 2023
Device and method for generating a Korean grammatical error correction dataset based on synthetic data, 2023
Device and method of tracing knowledge using difficulty information for English proficiency assessment, 2023
Device and method for cross-document relation extraction using reasoning path extension, 2023
Ai-based interactive book recommendation Chatbot, 2023
Diverse and effective question-answer pair generation system for education, 2023
A colloquial-based translation model for simultaneous translation, 2022
Toeic model using data augmentation techniques, 2022
Device and method for benchmark dataset robustness analysis using loss-adjusted, 2022
Device and method for domain adaptation tokenization, 2022
Device and method for detecting machine translation critical error based on prompt, 2022
Device and method for generating conversational model using knowledge and persona, 2022
Contrastive learning-based word sense disambiguation model to understand lexical semantic networks, 2022
Device and method for extracting dialogue-based relation using cloze-style masking with prompts for entity types and relational information, 2022
Device and method for generating Korean language model with cross-lingual post training, 2022
Device and method for detecting fake news utilizing user information, 2022
Device and method for numerically-aware machine reading comprehension question and answer, 2022
Method and apparatus for generating a conversation based on a user's persona and knowledge data, 2021
Device and method for generating dialogue based on pre-trained language model, 2021
Development of Korean relationship extraction model reflecting Korean characteristics, 2021
Device and method for generating training data for automatic post editing, 2021
Improving speech recognition performance using TTS in domain-specific environment, 2021
Multi-domain autonomous growth AI-based dialogue system, 2020
Multi-modal message aggregation for Korean visual question answering, 2020
Methods for resolving challenges in multi-class Korean sentiment analysis, 2020
Cross-lingual transfer of pre-trained transformers, 2020
Punctuation mark filler on Korean sentences using deep learning, 2020
Fast punctuation mark filler on Korean sentences using convolutional neural network, 2020
Autonomous driving robot for measuring radioactivity, 2020
Deep learning based multi-modal emotion recognizer, 2020
Meaningful representations using symbolic graphs, 2020
Zero-shot image sub classification via isolated features, 2019
Artificial intelligence based verbal speech recognition, 2019
Cross-validated ensemble methods, 2019
Priority based user order identification system, 2019
Domain adaptive training Bert for response selection, 2019
An analytical framework for automatically extracting formal information from unstructured security intelligence report, 2019
Unsupervised automatic document summarization using deep sentence representation, 2019

System of automatic summary and personal information management for privacy policy, 2019
Noise canceling necklace for pets using machine learning, 2019
An interactive approach to word sense disambiguation using word vector similarity, 2019
Method of intelligent preferred fashion recommendation using user profiling, 2019
An adaptive computational thinking game, 2019
Global relation extraction model for Korean documents, 2018
Method and system for outputting customized content using profile based on online activity of smart senior, and smart senior portal management server using the same, 2018
Terminal apparatus and method for searching image using deep learning, 2018
Method for recommending preferred fashion using user profiling, 2018
Apparatus and method for recommending customized content for smart senior, 2018
Device and method for providing a personalized banner advertising platform, 2017
Method and apparatus for cognitive modeling for user, 2017
Emotion-based sound control device and control method, 2017
Minimum learning judgement method and minimum learning judgement device, 2016
System for developing moot model, 2016
Apparatus and method for providing custom banner advertise platform, 2016
Method and apparatus for rating the reputation of digital contents, 2016
Personalized UX/UI providing device for broadcast standard and method thereof, 2016
Apparatus and method for providing changeable controller user interface based of user information and contents attribute, 2016
System for mining biometric data to predict programmer expertise and task difficulty, 2016
Method for stabilizing deep neural network using residual network, 2016
Method and system for preventing bank fraud, 2015
Tagging method and system based on task for digital study contents, 2015
Method and system of feeling share using text expression for user terminal, method and system of sympathy game using text expression for user terminal, 2015
Tag information collecting method and system for digital contents, 2015
Profile generating method of user terminal, 2015
Application recommend method for user on demand, 2014
Wisdom construction method, 2014
Apparatus and method of measuring personality based on brain wave, 2011
Emotional response measurement apparatus and emotional response measurement method, 2011
Apparatus and method for playing a game using a brain wave, 2010
System and method for generating learning challenges for foreign language learners, 2009

Technology Transfers Agreements

MAGIC(Multi-lingual Automated youtube subtitle Generation and Interpretation Companion), 2025
Vector embedding construction and prompting expertise, 2025
Persona-driven dialogue model, 2025
Context-aware question answering model, 2025
SYNAPSE: a multilingual consulting solution based on llm for query-answering on enterprise-owned data using symbolic and neural adaptive processing for seamless expertise, 2025
Device and method for generating interactive model using knowledge and persona, 2025
Uptempo-large language model, 2025
Document preprocessing technology for embedding construction, 2025

Food delivery intermediation method and device, 2024
Uracle-vector embedding construction and similarity search source technology development, 2024
Uracle-large language model, 2024
Vector embedding construction and similarity search source technology development, 2024
Vector embedding construction and similarity search source technology development and prompting know-how, 2024
Integrated data analytics and optimization technology for building advanced metadata-driven recommendation systems, 2023
Gaon-Large Language model, 2023
Foundational technology of question-answering utilizing search-augmented generation technique, 2023
Foundational technology of question-answering based on Retrieval-Augmented Generation(RAG), 2023
Qode-Large Language Model, 2023
Customization technology of Deep Learning models, 2023
Development of an interactive book recommendation terminal through AI-based voice analysis, 2023
Online comment reputation classification system, 2022
Development of Sentence-based Semantic Similarity Search technology model, 2022
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