Jinheon Baek

Email: jinheon.baek@kaist.ac.kr   **Homepage**: https://jinheonbaek.github.io   **Google Scholar**: /JinheonBaek

RESEARCH INTEREST

My research interest lies in machine learning for language, knowledge, and their intersections at scale. Previous work includes modeling interconnected data structures (texts and graphs), and retrieving them to augment language models, while verifying and personalizing their outputs, for practical natural language applications.

EDUCATION

KAIST   Seoul, South Korea
Ph.D. in Artificial Intelligence   Mar 2022 – Feb 2026 (Expected)
  Thesis: Contextualizing Foundation Models with Universal Retrieval and Verification, GPA: 4.18/4.30
M.S. in Artificial Intelligence   Mar 2020 – Feb 2022
  Thesis: Toward Accurate Learning of Graph Representations, GPA: 4.22/4.30

Korea University   Seoul, South Korea
B.S. in Computer Science and Engineering   Mar 2016 – Feb 2020
B.E. in Software Technology and Enterprise Program (Interdisciplinary Program)
  GPA: 4.40/4.50, GPA of Computer Science and Engineering: 4.48/4.50

EMPLOYMENT

Research Assistant, KAIST (Advisor: Prof. Sung Ju Hwang)   Jul 2019 - Present
- Conducting research primarily on machine learning for language, knowledge, and their intersections, especially on augmenting large language models with external knowledge to make their outputs more accurate.

Research Intern, Google DeepMind (Gemini)   Sep 2024 - Nov 2024
- Conducted research on in-context learning with many examples for frontier long context language models.

Research Intern, IBM Research   May 2024 - Aug 2024
- Conducted research on augmenting large language models for text to SQL with knowledge base construction.

Research Intern, Microsoft Research   Jun 2023 - Sep 2023
- Conducted research on augmenting large language models for personalization for search query suggestions.

Applied Scientist II Intern, Amazon (Alexa AI)   Aug 2022 - Nov 2022
- Conducted research on knowledge-augmented large language models with retrieval from knowledge graphs.

Chief Technology Officer (CTO), Jobshopper   Jul 2018 - Feb 2020
- Co-founded an education-technology startup for student careers, led a research & development group, exited the big-data-based university information platform (Majormap), and now only advising technical directions.

Undergrad. Research Assistant, Korea University (Advisor: Prof. Jaewoo Kang)   Mar 2018 - Jun 2019
- Conducted research on representing interconnected knowledge (food ingredients and academic majors) for their recommendations, and research on investigating the spatial reasoning ability of neural models.

Research Intern, Smart Data Research Group, ETRI   Jan 2019 - Feb 2019
- Researched an open data distribution platform with the international standard (DCAT), and utilized DevOps tools (Ansible, AWX, and Traefik) to manage nodes on a cloud, in a National AI Research Institute in Korea.

PUBLICATIONS

International Publications (∗: equal contribution; †: corresponding author)

[49] Multimodal Prompt Optimization: Why Not Leverage Multiple Modalities for MLLMs
Yumin Choi*, Dongki Kim*, <u>Jinheon Baek</u>, and Sung Ju Hwang
arXiv preprint

[48] Rethinking Reward Models for Multi-Domain Test-Time Scaling
Dong Bok Lee, Seanie Lee, Sangwoo Park, Minki Kang, <u>Jinheon Baek</u>, Dongki Kim, Dominik Wagner, Jiongdao Jin, Heejun Lee, Tobias Bocklet, Jinyu Wang, Jingjing Fu, Sung Ju Hwang, Jiang Bian, and Lei Song
arXiv preprint

[47] Paper2Code: Automating Code Generation from Scientific Papers in Machine Learning
Minju Seo, <u>Jinheon Baek</u>, Seongyun Lee, and Sung Ju Hwang
arXiv preprint

[46] UniversalRAG: Retrieval-Augmented Generation over Corpora of Diverse Modalities and Granularities
Woongyeong Yeo*, Kangsan Kim*, Soyeong Jeong, <u>Jinheon Baek</u>, and Sung Ju Hwang
arXiv preprint

[45] Chain of Retrieval: Multi-Aspect Iterative Search Expansion and Post-Order Search Aggregation for Full Paper Retrieval
Sangwoo Park, Jinheon Baek, Soyeong Jeong, and Sung Ju Hwang
arXiv preprint

[44] System Prompt Optimization with Meta-Learning
Yumin Choi*, Jinheon Baek*, and Sung Ju Hwang
Conference on Neural Information Processing Systems **(NeurIPS)**, 2025

[43] Database-Augmented Query Representation for Information Retrieval
Soyeong Jeong, Jinheon Baek, Sukmin Cho, Sung Ju Hwang, and Jong C. Park
Conference on Empirical Methods in Natural Language Processing **(EMNLP)**, 2025 **(Oral)**

[42] Sketch-of-Thought: Efficient LLM Reasoning with Adaptive Cognitive-Inspired Sketching
Simon A. Aytes, Jinheon Baek, and Sung Ju Hwang
Conference on Empirical Methods in Natural Language Processing **(EMNLP)**, 2025

[41] Efficient Real-time Refinement of Language Model Text Generation
Joonho Ko, Jinheon Baek, and Sung Ju Hwang
Conference on Empirical Methods in Natural Language Processing **(EMNLP)**, 2025

[40] CaMMT: Benchmarking Culturally Aware Multimodal Machine Translation
Emilio Villa-Cueva, Sholpan Bolatzhanova, Diana Turmakhan, Kareem Elzeky, ...,
Jinheon Baek, ..., Soyeong Jeong, ..., Injy Hamed, Atnafu Lambebo Tonja, and Thamar Solorio
Findings of Empirical Methods in Natural Language Processing **(EMNLP Findings)**, 2025

[39] Unified Multimodal Interleaved Document Representation for Retrieval
Jaewoo Lee*, Joonho Ko*, Jinheon Baek*, Soyeong Jeong, and Sung Ju Hwang
Vector Databases Workshop at ICML **(VecDB @ ICML)**, 2025

[38] Efficient Long Context Language Model Retrieval with Compression
Minju Seo, Jinheon Baek, Seongyun Lee, and Sung Ju Hwang
Annual Meeting of the Association for Computational Linguistics **(ACL)**, 2025

[37] Revisiting In-Context Learning with Long Context Language Models
Jinheon Baek, Sun Jae Lee, Prakhar Gupta, Geunseob (GS) Oh, Siddharth Dalmia, and Prateek Kolhar
Findings of the Association for Computational Linguistics **(ACL Findings)**, 2025

[36] Knowledge Base Construction for Knowledge-Augmented Text-to-SQL
Jinheon Baek, Horst Samulowitz, Oktie Hassanzadeh,
Dharmashankar Subramanian, Sola Shirai, Alfio Gliozzo, and Debarun Bhattacharjya
Findings of the Association for Computational Linguistics **(ACL Findings)**, 2025

[35] VideoRAG: Retrieval-Augmented Generation over Video Corpus
Soyeong Jeong*, Kangsan Kim*, Jinheon Baek*, and Sung Ju Hwang
Findings of the Association for Computational Linguistics **(ACL Findings)**, 2025

[34] Towards Better Understanding of Program-of-Thought Reasoning in Cross-Lingual and Multilingual Environments
Patomporn Payoungkhamdee, Pume Tuchinda, Jinheon Baek, Samuel Cahyawijaya, Can Udomcharoenchaikit,
Potsawee Manakul, Peerat Limkonchotiwat, Ekapol Chuangsuwanich, and Sarana Nutanong
Findings of the Association for Computational Linguistics **(ACL Findings)**, 2025

[33] ResearchAgent: Iterative Research Idea Generation over Scientific Literature with Large Language Models
Jinheon Baek, Sujay Kumar Jauhar, Silviu Cucerzan, and Sung Ju Hwang
Conference of the Nations of the Americas Chapter of the Association for Computational Linguistics **(NAACL)**, 2025 **(Oral)**

[32] The BiGGen Bench: A Principled Benchmark for Fine-grained Evaluation of Language Models with Language Models
Seungone Kim, Juyoung Suk, Ji Yong Cho, Shayne Longpre, Chaeeun Kim, Dongkeun Yoon, Guijin Son, Yejin
Cho, Sheikh Shafayat, Jinheon Baek, ..., Graham Neubig, Moontae Lee, Kyungjae Lee, and Minjoon Seo
Conference of the Nations of the Americas Chapter of the Association for Computational Linguistics **(NAACL)**, 2025 **(Best Paper)**

[31] CVQA: Culturally-diverse Multilingual Visual Question Answering Benchmark
David Romero, Chenyang Lyu, Haryo Akbarianto Wibowo, Teresa Lynn, Injy Hamed,
Aditya Nanda Kishore, ..., Jinheon Baek, ..., Soyeong Jeong, ..., Thamar Solorio, and Alham Fikri Aji
Conference on Neural Information Processing Systems **(NeurIPS)**, 2024 **(Oral)**

[30] Retrieval-Augmented Data Augmentation for Low-Resource Domain Tasks
Minju Seo*, <u>Jinheon Baek</u>*, James Thorne, and Sung Ju Hwang
Adaptive Foundation Models Workshop at NeurIPS **(AFM @ NeurIPS)**, 2024

[29] An Empirical Study of Multilingual Reasoning Distillation for Question Answering
Patomporn Payoungkhamdee, Peerat Limkonchotiwat, <u>Jinheon Baek</u>,
Potsawee Manakul, Can Udomcharoenchaikit, Ekapol Chuangsuwanich, and Sarana Nutanong
Conference on Empirical Methods in Natural Language Processing **(EMNLP)**, 2024

[28] Rethinking Code Refinement: Learning to Judge Code Efficiency
Minju Seo, <u>Jinheon Baek</u>, and Sung Ju Hwang
Findings of Empirical Methods in Natural Language Processing **(EMNLP Findings)**, 2024

[27] Adaptive-RAG: Learning to Adapt Retrieval-Augmented Large Language Models through Question Complexity
Soyeong Jeong, <u>Jinheon Baek</u>, Sukmin Cho, Sung Ju Hwang, and Jong C. Park
Conference of the North American Chapter of the Association for Computational Linguistics **(NAACL)**, 2024

[26] Knowledge-Augmented Large Language Models for Personalized Contextual Query Suggestion
<u>Jinheon Baek</u>, Nirupama Chandrasekaran, Silviu Cucerzan, Allen Herring, and Sujay Kumar Jauhar
The Web Conference **(WWW)**, 2024

[25] Knowledge-Augmented Reasoning Distillation for Small Language Models in Knowledge-Intensive Tasks
Minki Kang, Seanie Lee, <u>Jinheon Baek</u>, Kenji Kawaguchi, and Sung Ju Hwang
Conference on Neural Information Processing Systems **(NeurIPS)**, 2023

[24] Knowledge-Augmented Language Model Verification
<u>Jinheon Baek</u>, Soyeong Jeong, Minki Kang, Jong C. Park, and Sung Ju Hwang
Conference on Empirical Methods in Natural Language Processing **(EMNLP)**, 2023

[23] Test-Time Self-Adaptive Small Language Models for Question Answering
Soyeong Jeong, <u>Jinheon Baek</u>, Sukmin Cho, Sung Ju Hwang, and Jong C. Park
Findings of Empirical Methods in Natural Language Processing **(EMNLP Findings)**, 2023

[22] Direct Fact Retrieval from Knowledge Graphs without Entity Linking
<u>Jinheon Baek</u>[†], Alham Fikri Aji, Jens Lehmann, and Sung Ju Hwang
Annual Meeting of the Association for Computational Linguistics **(ACL)**, 2023

[21] Phrase Retrieval for Open-Domain Conversational Question Answering
with Conversational Dependency Modeling via Contrastive Learning
Soyeong Jeong, <u>Jinheon Baek</u>, Sung Ju Hwang, and Jong C. Park
Findings of the Association for Computational Linguistics **(ACL Findings)**, 2023

[20] Knowledge-Augmented Language Model Prompting for Zero-Shot Knowledge Graph Question Answering
<u>Jinheon Baek</u>[†], Alham Fikri Aji, and Amir Saffari
Natural Language Reasoning and Structured Explanations Workshop at ACL **(NLRSE @ ACL)**, 2023 **(Best Paper)**
Matching from Unstructured and Structured Data Workshop at ACL **(MATCHING @ ACL)**, 2023 **(Oral)**

[19] Personalized Subgraph Federated Learning
<u>Jinheon Baek</u>*, Wonyong Jeong*, Jiongdao Jin, Jaehong Yoon, and Sung Ju Hwang
International Conference on Machine Learning **(ICML)**, 2023

[18] Realistic Conversational Question Answering with Answer Selection
based on Calibrated Confidence and Uncertainty Measurement
Soyeong Jeong, <u>Jinheon Baek</u>, Sung Ju Hwang, and Jong C. Park
Conference of the European Chapter of the Association for Computational Linguistics **(EACL)**, 2023

[17] Graph Self-supervised Learning with Accurate Discrepancy Learning
Dongki Kim*, <u>Jinheon Baek</u>*, and Sung Ju Hwang
Conference on Neural Information Processing Systems **(NeurIPS)**, 2022

[16] Object Detection in Aerial Images with Uncertainty-Aware Graph Network
Jongha Kim, <u>Jinheon Baek</u>, and Sung Ju Hwang
Visual Object-oriented Learning meets Interaction Workshop at ECCV **(VOLI @ ECCV)**, 2022

[15] Knowledge Graph-Augmented Language Models for Knowledge-Grounded Dialogue Generation
Minki Kang*, Jin Myung Kwak*, Jinheon Baek*, and Sung Ju Hwang
Knowledge Retrieval and Language Models Workshop at ICML (**KRLM @ ICML**), 2022

[14] KALA: Knowledge-Augmented Language Model Adaptation
Minki Kang*, Jinheon Baek*, and Sung Ju Hwang
Conference of the North American Chapter of the Association for Computational Linguistics (**NAACL**), 2022 **(Oral)**

[13] Augmenting Document Representations for Dense Retrieval with Interpolation and Perturbation
Soyeong Jeong, Jinheon Baek, Sukmin Cho, Sung Ju Hwang, and Jong C. Park
Annual Meeting of the Association for Computational Linguistics (**ACL**), 2022 **(Oral)**

[12] Edge Representation Learning with Hypergraphs
Jaehyeong Jo*, Jinheon Baek*, Seul Lee*, Dongki Kim, Minki Kang, and Sung Ju Hwang
Conference on Neural Information Processing Systems (**NeurIPS**), 2021

[11] Task-Adaptive Neural Network Retrieval with Meta-Contrastive Learning
Wonyong Jeong*, Hayeon Lee*, Geon Park*, Eunyoung Hyung, Jinheon Baek, and Sung Ju Hwang
Conference on Neural Information Processing Systems (**NeurIPS**), 2021 **(Spotlight)**

[10] Unsupervised Document Expansion for Information Retrieval with Stochastic Text Generation
Soyeong Jeong, Jinheon Baek, ChaeHun Park, and Jong C. Park
Scholarly Document Processing Workshop at NAACL (**SDP @ NAACL**), 2021 **(Oral)**

[9] Accurate Learning of Graph Representations with Graph Multiset Pooling
Jinheon Baek*, Minki Kang*, and Sung Ju Hwang
International Conference on Learning Representations (**ICLR**), 2021

[8] Exploring The Spatial Reasoning Ability of Neural Models in Human IQ Tests
Hyunjae Kim*, Yookyung Koh*, Jinheon Baek, and Jaewoo Kang
Neural Networks, 2021

[7] Learning to Extrapolate Knowledge: Transductive Few-shot Out-of-Graph Link Prediction
Jinheon Baek, Dong Bok Lee, and Sung Ju Hwang
Conference on Neural Information Processing Systems (**NeurIPS**), 2020

Domestic Publications, mostly written in Korean

[6] Artificial Intelligence-Based High School Course and University Major
Recommendation System for Course-Related Career Exploration
Jinheon Baek, Hayeon Kim, and Kiwon Kwon
KIPS Transactions on Software and Data Engineering (KTSDE), 2021

[5] Graph Representation Learning with Attention-based Set Pooling
Jinheon Baek, Minki Kang, and Sung Ju Hwang
Conference of Korean Artificial Intelligence Association (CKAIA), 2020 **(Best Paper)**

[4] Embedding Academic Majors and Lectures for Analyzing Departments in University
Jinheon Baek, Gwanghoon Jang, Soyeong Jeong, Donghyeon Park, Kiwon Kwon, and Jaewoo Kang
Korea Computer Congress (KCC), 2019 **(Oral)**

[3] Embedding Food Ingredients Based on Chemical Combination in Dense Vector Space
Donghyeon Park, Yonggyu Park, Buru Chang, Jinheon Baek, and Jaewoo Kang
Korea Computer Congress (KCC), 2018 **(Best Paper)**

[2] Multimodal Approach for Blocking Obscene and Violent Contents
Jinheon Baek, Dakyeong Lee, Chaeyeon Hong, and Byeongtae Ahn
Journal of Convergence for Information Technology (JCIT), 7(6), 2017

Thesis

[1] Toward Accurate Learning of Graph Representations
Jinheon Baek
Master's Thesis, KAIST, 2022

PATENTS

[7] Automated Text to Query with Knowledge Base Generation
<u>Jinheon Baek</u>, Horst Samulowitz, Oktie Hassanzadeh,
Dharmashankar Subramanian, Sola Shirai, and Alfio Gliozzo
In preparation

[6] Response Generation Device Based on Retrieval Augmentation,
Method of Learning Artificial Neural Network for Response Generation
Sung Ju Hwang, Soyeong Jeong, Kangsan Kim, and <u>Jinheon Baek</u>
Korean patent number: 10-2025-0093874, filed on Jul 11, 2025

[5] Apparatus and Method for Providing Interactive Question and Answer Service
Jong C. Park, Soyeong Jeong, <u>Jinheon Baek</u>, Sung Ju Hwang, and Sukmin Cho
Korean patent number: 10-2024-0053617, filed on Apr 22, 2024

[4] Contextualization of Generative Language Models Based on Entity Resource Identifiers
Sujay Kumar Jauhar, Silviu-Petru Cucerzan, Nirupama Chandrasekaran, Allen Herring, and <u>Jinheon Baek</u>
USSN: 18/529,910, filed on Dec 05, 2023

[3] Electronic Apparatus and Method for Controlling Thereof
Sung Ju Hwang, <u>Jinheon Baek</u>, Wonyong Jeong, Hyeonuk Kim, Jiongdao Jin, and Jaehong Yoon
Korean patent number: 10-2022-0175165, filed on Dec 14, 2022

[2] Method for Building an Artificial Intelligence based Research Topics Database
Kiwon Kwon, and <u>Jinheon Baek</u>
Korean patent number: 10-2021-0017765, filed on Feb 08, 2021, and registered on Apr 19, 2022

[1] Method for Consulting on Exploration Activities based on Target Departments and Curriculum Achievement Standards
Kiwon Kwon, and <u>Jinheon Baek</u>
Korean patent number: 10-2021-0017764, filed on Feb 08, 2021, and registered on Jun 17, 2022

HONORS AND
AWARDS

Awarded the Presidential Science Scholarship for Graduate Study	2024-2026
Selected as One of the Great Reviewers within ACL ARR 2024–2025 Cycles (Multiple Times)	2024-2025
Quoted in Nature (2025) for Expert Commentary on AI-Generated Research (Link)	2025
Received the Best Paper Award at NAACL 2025	2025
Received the 3rd Place Poster Presentation Award at Citadel	Citadel Securities PhD Summit	2025
Awarded the Travel Grant from KAIST-Google Partnership Program for WWW 2024	2024
Received the Best Poster Presentation Award at Samsung AI Forum 2023	2023
Received the Best Paper Award at NLRSE Workshop in ACL 2023	2023
Awarded the ICML Travel Grant for ICML 2023	2023
Awarded the Google Travel Grant for NeurIPS 2022	2022
Selected as One of the Top Reviewers (Top 10%) for NeurIPS 2022	2022
Selected as One of the Highlighted Reviewers (Top 10%) for ICLR 2022	2022
Selected as One of the Best Reviewers (Top 10%) for ICML 2021	2021
Received the Best Paper Award at CKAIA 2020	2020
Awarded the Samsung Dream Scholarship	2016-2020
Received the First Prize in the Graduation Project Competition at Korea University	2019
Received the Academic Excellence Award (highest GPA) at Korea University	2019
Received the Second Prize for Excellence in the Microsoft Student Partners Activities	2018
Nominated as the Representative of Korean for Excellence in Microsoft Student Partners Activities	2017

ACADEMIC
SERVICES

Reviewer of **NeurIPS** (Conference on Neural Information Processing Systems)	2021-2025
Reviewer of **ICML** (International Conference on Machine Learning)	2021-2025
Reviewer of **ICLR** (International Conference on Learning Representations)	2022-2026
Reviewer of **ACL ARR** (Association for Computational Linguistics Rolling Review)	2023-2025
Reviewer of **WWW** (The Web Conference)	2024-2026
Reviewer of **AAAI** (The Association for the Advancement of Artificial Intelligence)	2025-2026
Reviewer of **TMLR** (Transactions on Machine Learning Research)	2022-2025
Reviewer of **COLM** (Conference on Language Modeling)	2024-2025
Reviewer of **LoG** (Learning on Graphs Conference)	2022-2025
Reviewer of **TPAMI** (IEEE Transactions on Pattern Analysis and Machine Intelligence)	2023, 2025
Reviewer of **ACM Computing Surveys**	2025
Reviewer of **Pattern Recognition**	2025

Reviewer of **Information Processing and Management**	2025
Reviewer of **International Journal of Human-Computer Interaction**	2025
Reviewer of **Expert Systems with Applications**	2025
Reviewer of **Internet of Things** (IEEE Internet of Things Journal)	2024
Reviewer of **TKDE** (IEEE Transactions on Knowledge and Data Engineering)	2023-2024
Reviewer of **SMCA** (IEEE Transactions on Systems, Man and Cybernetics: Systems)	2024
Reviewer of **T-IFS** (IEEE Transactions on Information Forensics & Security)	2024
Reviewer of **EACL** (Conference of the European Chapter of the Association for Computational Linguistics)	2023
Reviewer of **TNNLS** (IEEE Transactions on Neural Networks and Learning Systems)	2023
Reviewer of **TETCI** (IEEE Transactions on Emerging Topics in Computational Intelligence)	2023
Reviewer of **Big Data Research**	2023
Reviewer of **AISD** (AI and Scientific Discovery: Directions and Opportunities Workshop)	2025
Reviewer of **NLRSE** (Natural Language Reasoning and Structured Explanations Workshop)	2023-2024

TALKS AND SEMINARS	Empowering (AI) Research with AI: Assisting the End-to-End Workflow from Ideation to Execution	
	ETRI	Sep 2025
	Microsoft Research	Jul 2025
	Augmenting Language Models with External Knowledge	
	LG TECH CONFERENCE	Apr 2025
	Citadel | Citadel Securities PhD Summit	Mar 2025
	ResearchAgent: Iterative Research Idea Generation over Scientific Literature with LLMs	
	Korea AI Frontier Lab	Mar 2025
	Knowledge-Augmented (Large) Language Models	
	Vidyasirimedhi Institute of Science and Technology	May 2024
	ETRI	Oct 2023
	Microsoft Research	Aug 2023
	Knowledge-Augmented Language Model Verification	
	Korea Software Congress (KSC)	Dec 2023
	Samsung AI Forum	Nov 2023
	Direct Fact Retrieval from Knowledge Graphs & Personalized Subgraph Federated Learning	
	Korea Software Congress (KSC)	Dec 2023
	POSTECH ML Lab	Jul 2023
	Representation Learning on Graphs with Their Real-World Applications	
	Modulabs	Jul 2022
	Edge Representation Learning with Hypergraphs	
	KAIST AI Workshop	Jan 2022
	Accurate Learning of Graph Representations with Graph Multiset Pooling	
	KAIST AI Workshop	Jan 2022
	ICLR Social - ML in Korea	May 2021
	Introduction of Graph Neural Networks	
	Modulabs	Jan 2022
	Special Talk in Artificial Intelligence as an Alumnus	
	Korea University	Aug 2021
	Learning to Extrapolate Knowledge: Transductive Few-shot Out-of-Graph Link Prediction	
	Korean Conference on Computer Vision (KCCV)	Aug 2021
	NeurIPS Social - ML in Korea	Dec 2020
	Basic Algorithms of Machine Learning and Deep Learning with Python Code Challenges	
	Microsoft Coding Education Volunteer Group Seminar	Jul 2018
	Microsoft Student Partner Newcomer Tech Seminar	May 2018
	IaaS (Infrastructure as a Service) in Microsoft Azure	
	Microsoft Student Partner Newcomer Tech Seminar	Apr 2018
	Phishing Website Detection with Microsoft Azure Machine Learning Studio	
	KUSISWALL: Joint Seminar of Korea, Sookmyung and Hanyang Universities	Feb 2018
	Basic Algorithms of Machine Learning with Azure Machine Learning Studio	
	Microsoft Student Partner Evangelism	Nov 2017, Nov 2016
	Azure Cognitive Services with Serverless Cloud Computing using JavaScript and Python	
	Microsoft Student Partner Evangelism	Nov 2017
	Windows Hello: Microsoft Face Recognition System in Windows 10	
	Microsoft Student Partner Inner Tech Seminar	Oct 2016

Volunteering Experience

Oxford COVID-19 Government Response Tracker (OxCGRT)   Jan 2022 - Mar 2023
- Collected systematic data on policy measures that governments took to tackle COVID-19, aiding decision-makers and citizens in understanding governmental responses over 180 countries. Research papers: [a, b].

WoonWha - Education Volunteer Club, Korea University   Jul 2016 - Jul 2017
- Volunteered for 10 middle school students vulnerable to education twice a week, about 300 hours in total.

5th Volunteering Program, Samsung Dream Scholarship Foundation   Jan 2017
- Volunteered for children in Cambodia by teaching students and exchanging cultures for two weeks.

Extra-curricular Activities

Lead & Representative of Korea, Microsoft Student Partner   Jul 2016 - Jul 2020
- As a leader, promoted Microsoft products, recruited members, planned programs, and reviewed projects.
- As a representative of Korea on a global summit program, invited to Microsoft Build in 2017 which is the biggest annual conference held by Microsoft, and conducted a role as a technical ambassador.

Chairman, Inc0gnito Hacking Conference   Mar 2018 - Feb 2019
- Organized the information security conference in Korea held by undergraduate students over 10 universities, which covers techs, news, and trends on information security areas.

8th Trainee, SW Maestro   Jul 2017 - Dec 2017
- Researched and developed systems that automatically block obscene and violent movie content with machine learning, within the SW Maestro program that aims to train talented students on software in Korea.

Skills

Languages: Korean (mother tongue), English (fluent)
Programming (Coding): Python, JavaScript, Java, and C