# **SUNGWON KIM**

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<b>EDUCATION</b>				
Feb 2024 – Present		Korea Advanced Institute of Science and Technology (KAIST) DAEJEON, KOREA   Ph.D. in Graduate School of Data Science, at Data Science - Artificial Intelligence Lab (DSAIL) Advisor: Prof. Chanyoung Park		
Feb 2022 – Feb 2024		<b>Korea Advanced Institute of Science and Technology (KAIST)</b> DAEJEON, KOREA M.S. in Graduate School of Data Science, at <u>Data Science - Artificial Intelligence Lab (DSAIL)</u> Advisor: <u>Prof. Chanyoung Park</u> GPA: 3.94 out of 4.3		
Mar 2014 – Feb 2022		Korea UniversitySEOUB.S. in Architecture & Civil EngineeringGPA: 3.90 out of 4.5		
RESEARCH I	INTERES	Τ		
Data Mining Data-Efficien Federated Le	for Graph I nt Deep Lea arning	Neural Networks rning		
WORK EXPE	RIENCE			
Jul 2019 – Feb 2022		AI SOFTWARE OF KOREA (한국에이아이소프트) Co-CEO, Co-Founder	SEOUL, KOREA	
PUBLICATIO	ONS			
Conferences	[C5]	DSLR: Diversity Enhancement and Structure Learning for Rehearsal-based Graph Continual Learning Seungyoon Choi*, Wonjoong Kim*, Sungwon Kim, Yeonjun In, Sein Kim, Chanyoung Park WWW 2024 – The Web Conference		
	[C4]	Interpretable Prototype-based Graph Information Bottleneck Sangwoo Seo, Sungwon Kim, Chanyoung Park NeurIPS 2023 - In Conference on Neural Information Processing Systems (Neu (Gold Prize at the 2023 Samsung Humantech Paper Award)	eurIPS)	
	[C3]	Density of States Prediction of Crystalline Materials via Prompt-guided I Namkyeong Lee*, Heewoong Noh*, Sungwon Kim, Dongmin Hyun, Gyoung NeurIPS 2023 - In Conference on Neural Information Processing Systems (NeurIPS 2023)	<b>Multi-Modal Transformer</b> g S. Na, Chanyoung Park eurIPS)	
	[C2]	Task-Equivariant Graph Few-shot LearningSungwon Kim, Junseok Lee, Namkyeong Lee, Wonjoong Kim, Seungyoon CKDD 2023 - ACM SIGKDD Conference on Knowledge Discovery and Data N	hoi, Chanyoung Park ∕Iining	
	[C1]	Conditional Graph Information Bottleneck for Molecular Relational Learning Namkyeong Lee, Dongmin Hyun, Gyoung S Na, Sungwon Kim, Junseok Lee, Chanyoung Park ICML 2023 - International Conference on Machine Learning		
Journals	[J1]	<b>Deep Single-cell RNA-seq Data Clustering with Graph Prototypic</b> Junseok Lee, <b>Sungwon Kim</b> , Dongmin Hyun, Namkyeong Lee, Yejin Kim, C <b>Bioinformatics 2023</b> (SCI)	al Contrastive Learning hanyoung Park	
Workshops	[W2]	<b>Deep Single-cell RNA-seq Data Clustering with Graph Prototypic</b> Junseok Lee, <b>Sungwon Kim</b> , Dongmin Hyun, Namkyeong Lee, Yejin Kim, Cl <b>ICML 2023 Workshop on Computational Biology (WCB 2023)</b>	<b>ral Contrastive Learning</b> hanyoung Park	
	[W1]	<b>Predicting Density of States via Multi-modal Transformer</b> Namkyeong Lee, Heewoong Noh, <b>Sungwon Kim</b> , Dongmin Hyun, Gyoung S	Na, Chanyoung Park	

- ICLR 2023 Workshop on Machine Learning for Materials (ML4Materials)
- International Conference on Learning Representations

## **PROJECTS**

Jan 2021 – Feb 2022	<b>Translating Korean Legal Case's Sentences into Common Terms</b> 1 <sup>st</sup> award project at <i>Seoul R&amp;D research center (2021)</i>
Jun 2020 – Dec 2020	Sentence Similarity Model for Korean Legal Sentences 1 <sup>st</sup> award project at <i>Seoul R&amp;D research center (2020)</i>
Oct 2017 – Dec 2017	<b>Analysis of Color Cognitive of Older Persons or Children with Disabilities by Big Data</b> Development of Color Cognitive Test Kit and Multivariate Regression Analysis

#### HONORS AND AWARDS

Dec 2020	Seoul Renovation Challenge	Seoul Business Agency	
	Awarded for the best team out of 444 participants		
	Systems and methods for providing quantified AI answering serv	ices for legal questions	
Jul 2015	National University Rowing Conference Top award, Crew of Korea University Rowing Team	Korean Rowing Association	

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Oct 2019

**Big data and AI-based Color Recognition Measurement Platform and Method** Patent Number : 10-2351169-00-00 Registered Patent

## **TEACHING EXPERIENCE**

AI Specialist Course, Samsung Electronics		
Teaching Assistant		
DS503: Machine Learning for Data Science, KAIST		
Teaching Assistant		
AI Business Transformation Program, KAIST		
Researcher		
IE343: Statistical Machine Learning, KAIST		
Teaching Assistant		

#### TALKS AND SEMINARS

Winter 2023	Task-Equivariant Graph Few-shot Learning
	Top Conference Session of Korea Software Congress (KSC)

### ACTIVITIES

Mar 2015 - Present	Korea University Rowing Team
Apr 2019 – Feb 2020	Working Holidays in Australia
	Swimming Instructor, United Swimming Club

## **REFERENCES**

Prof.	Chan	young	Par	<u>·k</u>	
As	sistant	profes	sor,	KAIS	57
As	sistant	profes	sor,	KAI	5

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