

JEONGWHAN CHOI
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[Homepage Link](#)
[Google Scholar Link](#)

RESEARCH EXPERIENCE

Jang Yeong Sil Fellow	<i>Apr 2026 - Present</i>
Post-doctoral Researcher	<i>Sep 2025 - Present</i>
<i>Information & Electronics Research Institute, KAIST (Advisor: Noseong Park)</i>	
Ph.D. Student/Candidate	<i>Aug 2020 - Aug 2025</i>
<i>BigDyL, Yonsei University (Advisor: Noseong Park and Sung-Bae Cho)</i>	
Undergraduate Student Research Assistant	<i>Jan 2020 - Aug 2020</i>
<i>AI & SE Lab, Jeonbuk National University (Advisor: Duksan Ryu)</i>	
Undergraduate Student Research Assistant	<i>Nov 2018 - Nov 2019</i>
<i>SSEL, Jeonbuk National University (Advisor: Suntae Kim)</i>	

EDUCATION

Yonsei University, Republic of Korea	<i>Sep 2020 - Aug 2025</i>
<i>Ph.D. in Artificial Intelligence</i>	
<i>Advisors: Noseong Park and Sung-Bae Cho</i>	
<ul style="list-style-type: none"> • Thesis Title: Empowering Deep Learning on Graphs: Tackling Over-smoothing and Over-squashing <ul style="list-style-type: none"> - Thesis Committee: Sung-Bae Cho (Chair), Seong Jae Hwang, Dongha Lee, Wonyong Shin and Noseong Park • GPA: 4.21/4.3 	
Jeonbuk National University, Republic of Korea	<i>Mar 2016 - Aug 2020</i>
<i>B.S. in Software Engineering</i>	
<ul style="list-style-type: none"> • GPA: 3.98/4.5 (Presidential Award for Outstanding Undergraduate) 	

SELECTED PUBLICATIONS

* indicates equal contribution.

1. **Jeongwhan Choi***, Jongwoo Kim*, Woosung Kang, Noseong Park, "Learning Posterior Predictive Distributions for Node Classification from Synthetic Graph Priors", International Conference on Learning Representations (*ICLR*), 2026. [[OpenReview](#)]
2. **Jeongwhan Choi**, Seungjun Park, Sumin Park, Sung-Bae Cho, Noseong Park "Are Graph Transformers Necessary? Efficient Long-Range Message Passing with Fractal Nodes in MPNNs", AAAI Conference on Artificial Intelligence (*AAAI*), 2026. [[Oral Presentation](#)][[Paper](#)]
3. Youn-Yeol Yu*, **Jeongwhan Choi***, Jaehyeon Park, Kookjin Lee, Noseong Park, "PIORF: Physics-Informed Ollivier-Ricci Flow for Long-Range Interactions in Mesh Graph Neural Networks", International Conference on Learning Representations (*ICLR*), 2025. [[Paper](#)]
4. **Jeongwhan Choi***, Hyowon Wi*, Jayoung Kim, Yehjin Shin, Kookjin Lee, Nathaniel Trask, Noseong Park, "Graph Convolutions Enrich the Self-Attention in Transformers!", Conference on Neural Information Processing Systems (*NeurIPS*), 2024. [[Paper](#)]
5. **Jeongwhan Choi**, Sumin Park, Hyowon Wi, Sung-Bae Cho, Noseong Park, "PANDA: Expanded Width-Aware Message Passing Beyond Rewiring", International Conference on Machine Learning (*ICML*), 2024. [[Paper](#)]
6. Yehjin Shin*, **Jeongwhan Choi***, Hyowon Wi, Noseong Park, "An Attentive Inductive Bias for Sequential Recommendation beyond the Self-Attention", AAAI Conference on Artificial Intelligence (*AAAI*), 2024. [[Paper](#)]

7. **Jeongwhan Choi**, Seoyoung Hong, Noseong Park, Sung-Bae Cho, "GREAD: Graph Reaction-Diffusion Networks", International Conference on Machine Learning (*ICML*), 2023. [[Paper](#)][[Code](#)]
8. **Jeongwhan Choi**, Seoyoung Hong, Noseong Park, Sung-Bae Cho, "Blurring-Sharpening Process Models for Collaborative Filtering", ACM SIGIR Conference on Research and Development in Information Retrieval (*SIGIR*), 2023. [[Paper](#)][[Code](#)]
9. **Jeongwhan Choi** and Noseong Park, "Graph Neural Rough Differential Equations for Traffic Forecasting", ACM Transactions on Intelligent Systems and Technology (*TIST*), 2023. [[Paper](#)][[IF=10.489](#)]
10. **Jeongwhan Choi**, Hwangyong Choi, Jeehyun Hwang, Noseong Park, "Graph Neural Controlled Differential Equations for Traffic Forecasting", AAAI Conference on Artificial Intelligence (*AAAI*), 2022. [[Paper](#)][[Code](#)][[Oral Presentation](#)]
11. **Jeongwhan Choi**, Jinsung Jeon, and Noseong Park, "LT-OCF: Learnable-Time ODE-based Collaborative Filtering", ACM International Conference on Information and Knowledge Management (*CIKM*), 2021. [[Paper](#)] [[Code](#)]

ALL PUBLICATIONS

* indicates equal contribution.

CONFERENCE PAPERS

1. Woosung Kang, Jiwon Jeong, Jonghyeok Shin, **Jeongwhan Choi**, Noseong Park, "One Sequential Recommendation Model Pretrained from Synthetic Priors Predicts Multiple Datasets", ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD), 2026. [[Acceptance Rate 18.5%](#)]
2. **Jeongwhan Choi***, Jongwoo Kim*, Woosung Kang, Noseong Park, "Learning Posterior Predictive Distributions for Node Classification from Synthetic Graph Priors", International Conference on Learning Representations (ICLR), 2026. [[OpenReview](#)]
3. **Jeongwhan Choi**, Seungjun Park, Sumin Park, Sung-Bae Cho, Noseong Park "Are Graph Transformers Necessary? Efficient Long-Range Message Passing with Fractal Nodes in MPNNs", AAAI Conference on Artificial Intelligence (*AAAI*), 2026. [[Oral Presentation](#)][[Acceptance Rate 17.6% \(4,167/23,680\)](#)][[Paper](#)]
4. Seonkyu Lim*, **Jeongwhan Choi***, and Jaehoon Lee*, "FraudCenGCL: Role-Aware Graph Contrastive Learning for Low-Homophily Fraud Detection", In IEEE International Conference on Big Data (Big Data), 2025.
5. Yehjin Shin, **Jeongwhan Choi**, Seojin Kim, and Noseong Park, "TV-Rec: Time-Variant Convolutional Filter for Sequential Recommendation," Conference on Neural Information Processing Systems (NeurIPS), 2025. [[Acceptance Rate 25.52% \(5290/21,575\)](#)]
6. Hyowon Wi, **Jeongwhan Choi**, and Noseong Park, "Learning Advanced Self-Attention for Linear Transformers in the Singular Value Domain", International Joint Conference on Artificial Intelligence (*IJCAI*), 2025. [[Acceptance Rate 19.3% \(1042/5404\)](#)][[Paper](#)]
7. Youn-Yeol Yu*, **Jeongwhan Choi***, Jaehyeon Park, Kookjin Lee, and Noseong Park, "PIORF: Physics-Informed Ollivier-Ricci Flow for Long-Range Interactions in Mesh Graph Neural Networks", International Conference on Learning Representations (ICLR), 2025. [[Acceptance Rate 32.08%](#)][[Paper](#)]
8. Seonkyu Lim*, **Jeongwhan Choi***, Jaehoon Lee, Noseong Park, "FrAug: Enhanced Fraud Detection in Interbank Transfers via Augmented Account Features", IEEE BigComp, 2025.
9. Chaejeong Lee*, **Jeongwhan Choi***, Hyowon Wi, Sung-Bae Cho, and Noseong Park, "SCONE: A Novel Stochastic Sampling to Generate Contrastive Views and Hard Negative Samples for Recommendation", ACM International Conference on Web Search and Data Mining (WSDM), 2025. [[Acceptance rate: 17.3% \(106/615\)](#)]

10. **Jeongwhan Choi***, Hyowon Wi*, Jayoung Kim, Yehjin Shin, Kookjin Lee, Nathaniel Trask, Noseong Park, "Graph Convolutions Enrich the Self-Attention in Transformers!", Conference on Neural Information Processing Systems (*NeurIPS*), 2024. [[Paper Acceptance rate: 25.8%](#)][[arXiv](#)]
11. Seonkyu Lim*, **Jeongwhan Choi***, Sang-Ha Yoon, Shinhyuck Kang, Young-Min Kim, and Hyunjoong Kang, "Bridging Dynamic Factor Models and Neural Controlled Differential Equations for Nowcasting GDP", in Proceedings of the 33rd ACM International Conference on Information and Knowledge Management (*CIKM*), 2024. [[Applied Research Paper Acceptance rate: 32.59% \(103/316\)](#)]
12. **Jeongwhan Choi**, Sumin Park, Hyowon Wi, Sung-Bae Cho, and Noseong Park, "PANDA: Expanded Width-Aware Message Passing Beyond Rewiring", International Conference on Machine Learning (*ICML*), 2024. [[Acceptance Rate 27.5% \(2610/9473\)](#)][[Paper](#)][[arXiv](#)]
13. Jayoung Kim, Yehjin Shin, **Jeongwhan Choi**, Hyowon Wi, Noseong Park, "Polynomial-based Self-Attention for Table Representation Learning", International Conference on Machine Learning (*ICML*), 2024. [[Acceptance Rate 27.5% \(2610/9473\)](#)][[Paper](#)]
14. Seoyoung Hong, **Jeongwhan Choi**, Yeon-Chang Lee, Srijan Kumar, Noseong Park, "SVD-AE: Simple Autoencoders for Collaborative Filtering", International Joint Conference on Artificial Intelligence (*IJCAI*), 2024. [[Acceptance Rate 14.00% \(791/5651\)](#)][[arXiv](#)]
15. Youn-Yeol Yu, **Jeongwhan Choi**, Woojin Cho, Kookjin Lee, Nayong Kim, Kiseok Chang, ChangSeung Woo, Ilho Kim, SeokWoo Lee, Joon Young Yang, Sooyoung Yoon, and Noseong Park, "Learning Flexible Body Collision Dynamics with Hierarchical Contact Mesh Transformer", in *ICLR*, 2024. [[Acceptance Rate 30.81% \(2250/7304\)](#)][[arXiv](#)]
16. Yehjin Shin*, **Jeongwhan Choi***, Hyowon Wi, Noseong Park, "An Attentive Inductive Bias for Sequential Recommendation beyond the Self-Attention", AAAI Conference on Artificial Intelligence (AAAI), 2024. [[Acceptance Rate 23.75% \(2342/12100\)](#)] [[arXiv](#)]
17. Seonkyu Lim, Jaehyeon Park, Seojin Kim, Hyowon Wi, Haksoo Lim, Jinsung Jeon, **Jeongwhan Choi**, and Noseong Park, "Long-term Time Series Forecasting based on Decomposition and Neural Ordinary Differential Equations", in *IEEE International Conference on Big Data (Big Data)*, 2023.
18. **Jeongwhan Choi** and Duksan Ryu, "QoS-Aware Graph Contrastive Learning for Web Service Recommendation", in *Proceedings of the 30th Asia-Pacific Software Engineering Conference (APSEC 2023)*, 2023.
19. **Jeongwhan Choi**, Seoyoung Hong, Noseong Park and Sung-Bae Cho, "GREAD: Graph Reaction-Diffusion Networks", in *Proceedings of the 40th International Conference on Machine Learning (ICML)*, 2023. [[Paper](#)][[Code](#)][[Paper Acceptance rate: 27.94% \(1,827/6,538\)](#)]
20. **Jeongwhan Choi**, Seoyoung Hong, Noseong Park and Sung-Bae Cho, "Blurring-Sharpening Process Models for Collaborative Filtering", in *Proceedings of the 46th ACM Conference on Research and Development in Information Retrieval (SIGIR)*, 2023. [[Paper](#)][[Code](#)][[Paper Acceptance rate: 20.1% \(165/822\)](#)]
21. **Jeongwhan Choi** and Duksan Ryu, "Graph Convolution-based Collaborative Filtering for Web Service QoS Ranking", in *Proceedings of the 25th Korea Conference on Software Engineering (KCSE 2023)*, 2023, pp. 58-67.
22. Seoyoung Hong, Heejoo Shin, **Jeongwhan Choi**, and Noseong Park, "Prediction-based One-shot Dynamic Parking Pricing", in *Proceedings of the 31st ACM International Conference on Information and Knowledge Management (CIKM)*, 2022.[[Paper](#)][[Code](#)]
23. **Jeongwhan Choi**, Hwangyong Choi, Jeehyun Hwang and Noseong Park, "Graph Neural Controlled Differential Equations for Traffic Forecasting", AAAI Conference on Artificial Intelligence (AAAI), 2022. [[Paper](#)][[Code](#)][[Oral Presentation](#)][[Acceptance rate: 15.2% \(1,370/9,020\)](#)]
24. Taeyong Kong, Taeri Kim, Jinsung Jeon, **Jeongwhan Choi**, Yeon-Chang Lee, Noseong Park and Sang-Wook Kim, "Linear, or Non-Linear, That is the Question!", in *Proceedings of the 15th ACM International Web Search and Data Mining Conference (WSDM)*, 2022. [[Paper](#)][[Code](#)] [[Regular Paper Acceptance rate: 15.8% \(80/505\)](#)] [[Overall Acceptance Rate: 18% \(315/1,765\)](#)]
25. **Jeongwhan Choi** and Duksan Ryu, "Self-Supervised Learning Using Feature Subsets of Software Defect Data", in *Proceedings of the Korea Software Congress (KSC)*, Dec. 2021, pp.203-205.

26. Jeehyun Hwang, **Jeongwhan Choi**, Hwangyong Choi, Kookjin Lee, Dongeun Lee, and Noseong Park, "Climate Modeling with Neural Diffusion Equations", in *Proceedings of the 21st IEEE International Conference on Data Mining (ICDM)*, 2021. [[Paper](#)] [[Code](#)] [[Regular paper acceptance rate: 9.9% \(98/990\)](#)] [[Overall Acceptance Rate: 20% \(198/990\)](#)]
27. **Jeongwhan Choi**, Jinsung Jeon, and Noseong Park, "LT-OCF: Learnable-Time ODE-based Collaborative Filtering", in *Proceedings of the 30th ACM International Conference on Information and Knowledge Management (CIKM)*, 2021. [[Paper](#)] [[Code](#)] [[Regular paper acceptance rate: 21.7% \(271/1,251\)](#)] [[Overall Acceptance rate: 22% \(1,101/4,989\)](#)]
28. **Jeongwhan Choi** and Duksan Ryu, "Bayesian Optimization Framework for Cross-Version Defect Prediction", in *Proceedings of the 23rd Korea Conference on Software Engineering (KCSE 2021)*, 2021, pp. 63-72. [[Best Paper](#)]
29. **Jeongwhan Choi** and Duksan Ryu, "A Study on the Applicability of Transfer Learning Techniques for Cross-Project Defect Regression", in *Proceedings of the Korea Software Congress (KSC)*, 2020, pp. 150 - 152.
30. **Jeongwhan Choi**, Duksan Ryu, and Suntae Kim, "Comparative Study of Transfer Learning Models for Cross-Project Automotive Software Defect Prediction", In *Proceedings of the Korea Computer Congress (KCC)*, 2020, pp. 257–259.
31. **Jeongwhan Choi**, Jiwon Choi, Duksan Ryu, and Suntae Kim, "Prediction for Configuration Bug Report Using Text Mining", in *Proceedings of the 22nd Korea Conference on Software Engineering (KCSE 2020)*, 2020, pp. 350–357.
32. Seounghan Song, **Jeongwhan Choi**, Mingu Kang, and Cheoljung Yoo, "A Software Module That Analyzes the Relationship Between Headline and Content of the Web Article: CHIMERA", in *Proceedings of the 2019 KIIT DCS Summer Conference*, 2019, vol. 14, pp. 437–440.

JOURNAL PAPERS

1. Yeon Uk Jeong, **Jeongwhan Choi**, Noseong Park, Jae Yong Ryu, and Yi Rang Kim, "Predicting Drug-Drug Interactions: A Deep Learning Approach with GCN-Based Collaborative Filtering", *Artificial Intelligence in Medicine*, 2025. [[IF 6.1](#)] [[Paper](#)]
2. Taeyang Lee, **Jeongwhan Choi**, Inyeob Na, Insun Yoo, Sungil Woo, Kwang Jong Kim, Mikyung Park, Joonghwan Yang, Jeongguk Min, Seokwoo Lee, Noseong Park, Joonyoung Yang, "Graph-Based Representation Approach for Deep Learning of Organic Light-Emitting Diode Devices", *Advanced Intelligent System*, 2024. [[IF=6.8](#)][[Paper](#)]
3. **Jeongwhan Choi** and Noseong Park, "Graph Neural Rough Differential Equations for Traffic Forecasting", *ACM Transactions on Intelligent Systems and Technology (TIST)*, 2023. [[Paper](#)][[IF=10.489](#)]
4. Hwangyong Choi, **Jeongwhan Choi**, Jeehyun Hwang, Kookjin Lee, Dongeun Lee and Noseong Park, "Climate Modeling with Neural Advection-Diffusion Equation", *Knowledge and Information Systems*, Jan. 2023. [[Paper](#)] [[IF=3.205\(2021\) Five year impact factor](#)]
5. **Jeongwhan Choi** and Duksan Ryu, "Bayesian Optimization Framework for Improved Cross-Version Defect Prediction", *KIPS Transactions on Software and Data Engineering (KTSDE)*, Vol. 10, No. 9, pp. 339-348, Sep. 2021.
6. **Jeongwhan Choi**, Jiwon Choi, Duksan Ryu and Suntae Kim, "Improved Prediction for Configuration Bug Report Using Text Mining and Dimensionality Reduction", *Journal of KIISE*, 2021, Vol. 48, No. 1, pp. 35-42.
7. **Jeongwhan Choi**, Jiwoo Noh, and Suntae Kim, "Prediction Techniques for Difficulty Level of Hanja Using Multiple Linear Regression", *The Journal of the Institute of Internet, Broadcasting and Communication*, vol. 19, no. 6, 2019.
8. **Jeongwhan Choi**, "Iceberg-Ship Classification in SAR Images Using Convolutional Neural Network with Transfer Learning", *Journal of Internet Computing and Services*, vol. 19, no. 4, pp. 35–44, 2018.

ABSTRACTS AND CONTRIBUTIONS TO PEER-REVIEWED WORKSHOPS

1. Jinsung Jeon, Jaehyeon Park, Sewon Park, **Jeongwhan Choi**, Minjung Kim, and Noseong Park, "Possibility for Proactive Anomaly Detection", I Can't Believe It's Not Better: Challenges in Applied Deep Learning (ICBINB) Workshop at ICLR, 2025. [[Paper](#)]
2. Seonkyu Lim*, **Jeongwhan Choi***, Noseong Park, "FraudCenGCL: Enhancing Fraud Detection via Dual-View Graph Contrastive Learning with Account Centrality Features", Social Impact: Bridging Innovations in Finance, Social Media, and Crime Prevention Workshop at AAAI 2025.
3. Seonkyu Lim*, **Jeongwhan Choi***, Jaehoon Lee, Noseong Park, "FrAug: Enhanced Fraud Detection in Interbank Transfers via Augmented Account Features", AI4TS Workshop at AAAI 2025.
4. Seonkyu Lim*, **Jeongwhan Choi***, Jaehoon Lee, Noseong Park, "Enhanced Fraud Detection in Bank Transfers via Augmented Account Features", ACM ICAIF Workshop on Foundation Models for Time Series: Exploring New Frontiers (FM4TS), 2024. [[Accepted for oral presentation](#)]
5. Jaehoon Lee, Chan Kim, Gyumin Lee, Haksoo Lim, **Jeongwhan Choi**, Kookjin Lee, Dongeun Lee, Sanghyun Hong, and Noseong Park, "HyperNetwork Approximating Future Parameters for Time Series Forecasting under Temporal Drifts", *NeurIPS 2023 Workshop on Distribution Shifts (DistShift)*, 2023.

PREPRINT PAPERS

1. **Jeongwhan Choi**, Woosung Kang, Minseo Kim, Jongwoo Kim, Noseong Park, "Can TabPFN Compete with GNNs for Node Classification via Graph Tabularization?", arXiv preprint arXiv: Arxiv-2512.08798, 2025. [[arXiv](#)]
2. Jeongeun Lee, Seongku Kang, Won-Yong Shin, **Jeongwhan Choi**, Noseong Park, and Dongha Lee, "Graph Signal Processing for Cross-Domain Recommendation", arXiv preprint arXiv: Arxiv-2407.12374. [[arXiv](#)]
3. **Jeongwhan Choi***, Hyowon Wi*, Chaejeong Lee, Sung-Bae Cho, Dongha Lee, Noseong Park, "RDGCL: Reaction-Diffusion Graph Contrastive Learning for Recommendation", arXiv preprint arXiv: Arxiv-2312.16563, 2023. [[arXiv](#)]
4. Jaehoon Lee, Chan Kim, Gyumin Lee, Haksoo Lim, **Jeongwhan Choi**, Kookjin Lee, Dongeun Lee, Sanghyun Hong, and Noseong Park, "Time Series Forecasting with Hypernetworks Generating Parameters in Advance", *arXiv preprint arXiv: Arxiv-2211.12034*, 2022. [[Paper](#)]

AWARDS & SCHOLARSHIPS

Gold Reviewer Award , ICML 2026.	<i>May 2026</i>
Jang Young Sil Fellow Program (Excellence Track), KAIST. (60M KRW for one year)	<i>Mar 2026</i>
Merit Academic Paper Award , Yonsei University	<i>Feb 2026</i>
Best Paper Runner-up Award (3M KRW), KAIST-Samsung Industry-Academic Collaboration	<i>Nov 2025</i>
Outstanding Reviewer (Top 10%) , KDD 2025 (February Cycle).	<i>Jun 2025</i>
Merit Academic Paper Award , Yonsei University	<i>Feb 2025</i>
Outstanding Reviewer (Top 10%) , KDD 2025 (August Cycle).	<i>Dec 2024</i>
Qualcomm Innovation Fellowship Winner , Qualcomm Technologies Inc. (4M KRW, approx. 2.8K USD)	<i>Dec 2024</i>
Top Reviewer Award , LoG 2024.	<i>Nov 2024</i>
Top Reviewer Award , NeurIPS 2024.	<i>Nov 2024</i>
First Prize of Idea Competition , Korea Financial Telecommunications & Clearing Institute.	<i>Oct 2024</i>
Merit Academic Paper Award , Yonsei University	<i>Jul 2024</i>

Best Paper Award , Yonsei University (Best paper in Dept. of Artificial Intelligence)	<i>Jan 2024</i>
Graduate Student Research Assistantship (GSRA) Scholarship, Yonsei University	<i>May 2023</i>
Academic Research Fellowship (ARF), Brain Korea 21 (BK21) Program, Yonsei University	<i>Jan 2023</i>
Graduate Student Research Assistantship (GSRA) Scholarship, Yonsei University	<i>Nov 2022</i>
Academic Research Fellowship (ARF), Brain Korea 21 (BK21) Program, Yonsei University	<i>Sep 2022</i>
Excellent Academic Paper Award , Yonsei University	<i>Jul 2022</i>
Graduate Student Research Assistantship (GSRA) Scholarship, Yonsei University	<i>Apr 2022</i>
Best Paper Awards in the 23rd Korea Conference on Software Engineering (KCSE 2021)	<i>Feb 2021</i>
Presidential Award for Outstanding Undergraduate, Jeonbuk National University	<i>Dec 2019</i>
Best Paper Awards in Dept. of Software Engineering, Jeonbuk National University	<i>Dec 2019</i>
Best Paper Awards, Korean Institute of Information Technology	<i>Jun 2019</i>
The National Scholarship for Science and Engineering , Ministry of Science and ICT (과학기술정보통신부) 2018-2019	
Academic Excellence Award (성적우수상), Jeonbuk National University	<i>2017</i>
Presidential Academic Excellence Award (성적우수 총장상), Jeonbuk National University	<i>2016</i>

TALKS

INVITED TALKS & GUEST LECTURES

Guest Lecture (1 hour), invited by Yeonchang Lee, UNIST	<i>Nov 2025</i>
Invited talk at " Making Decisions with AI " seminar, Pusan National University	<i>Nov 2025</i>
Guest Lecture (3 hours), invited by Jonggu Kang of Sungshin Women's University	<i>Oct 2025</i>

CONFERENCE & WORKSHOP TALKS

Talk on Top-conference session, Korea Software Congress (KSC 2023)	<i>Dec 2023</i>
Talk on Top-conference session, Korea Computer Congress (KCC 2023) [slides]	<i>Jun 2023</i>
Talk on 1st Workshop on AI held by Yonsei Univ. [slides][poster]	<i>Oct 2022</i>
Talk on Top-conference session, Korea Computer Congress (KCC 2022) [slides]	<i>Jul 2022</i>

TUTORIALS

Talk on 2023 KSIAM AI Winter School, held by Korean Society for Industrial and Applied Mathematics (KSIAM)[slides][website]	<i>Feb 2023</i>
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POSTERS

Poster presentation for AIGS Symposium 2022 held at the COEX Grand Ballroom [poster]	<i>Aug 2022</i>
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INDUSTRIAL & COMMUNITY TALKS

Talk on 1st Seminar held by Graph User Group (GUG)	<i>Jun 2023</i>
Tutorial on Korea Artificial Intelligence Association (KAIA)	<i>Nov 2021</i>
<ul style="list-style-type: none"> • Topic: "Graph-based Collaborative Filtering and Neural ODEs" • This talk is part of a tutorial called "Deep Learning Inspired by Differential Equation" [slides]. 	

ACADEMIC SERVICES

CONFERENCE ORGANIZER

- General Chair: LoG 2026
- Website Chair: LoG 2025
- Web Chair: CIKM 2025
- Session Chair: CIKM 2025

AREA CHAIR FOR CONFERENCE

- Graph Foundation Models Workshop at ICML 2026

REVIEWER OR PROGRAM COMMITTEE MEMBER FOR CONFERENCE

- NeurIPS 2024 (**Top 8% Reviewer Award**), 2025 (Benchmark & Datasets and Position Paper Tracks), 2026
- KDD 2023, 2024, 2025 August Track (**Outstanding Reviewer**), 2025 February Track (**Outstanding Reviewer**), 2026 First Cycle
- IJCAI-ECAI 2026
- PAKDD 2026
- WebConf (Former WWW) 2026
- NLDL 2026
- AAAI 2024, 2025, 2026
- ICML 2025, 2026
- AISTATS 2025, 2026
- SIGIR 2025, 2026
- WSDM 2025, 2026
- ICANN 2025
- ECAI 2025
- ICLR 2025
- ICLR 2025
- IJCAI 2024, 2025
- CIKM 2024, 2025 (Full paper and short paper tracks)
- SDM 2024
- LoG 2022, 2023, 2024 (**Top Reviewer Award**), 2025
- ICDM 2021, 2022, 2026

REVIEWER FOR JOURNAL

- ACM Transactions on Recommender Systems –1 review in 2026
- Machine Learning –1 review in 2026
- ICT Express –1 review in 2026
- IEEE Transactions on Industrial Informatics –1 review in 2025
- ACM Transactions on Information Systems –1 review 2025
- Artificial Intelligence in Medicine –3 reviews between 2025 and 2026
- Proceedings of the Royal Society A –2 reviews in 2025
- Data Mining and Knowledge Discovery –1 review in 2025
- Expert Systems With Applications (ESWA) –11 reviews in between 2025 and 2026

- IEEE Transactions on Emerging Topics in Computing —2 reviews in 2025
- Transactions on Machine Learning Research (TMLR) —9 reviews between 2025 and 2026
- Knowledge-Based Systems —9 reviews in 2025
- Applied Economics Letters —1 review in 2024
- Neurocomputing —6 reviews between 2024 and 2025
- IEEE Transactions on Image Processing (TIP) —1 review in 2024
- IEEE Transactions on Knowledge and Data Engineering (TKDE) —4 reviews between 2023 and 2026
- Journal of Intelligent & Fuzzy Systems —1 review in 2024
- Applied Soft Computing —17 reviews between 2024 and 2026
- Applied Artificial Intelligence —2 reviews in 2023
- IEEE Transactions on Intelligent Transportation Systems (TIST) —3 reviews between 2022 and 2025

REVIEWER FOR WORKSHOP

- I Can't Believe It's Not Better (ICBINB) Workshop at ICLR 2026
- NN4G+ Special Session at ICANN 2025
- TGL Workshops at NeurIPS 2023 and KDD 2025
- Machine Learning and the Physical Sciences (ML4PS) Workshops at NeurIPS 2024 and NeurIPS 2025
- AI4TS Workshops at AAAI 2025, SDM 2025, IJCAI 2025, ICDM 2025
- Workshop on Graphs and More Complex Structures for Learning and Reasoning (GCLR) at AAAI 2024 and AAAI 2026

PATENTS

- [Patent Application] Electronic Apparatus for Providing Recommendation Information and Operating Method Thereof, Noseong Park, Yehjin Shin, **Jeongwhan Choi**, Hyowon Wi, US Patent (Application No. 18/931,310, Filed: 2024.10.30) *Oct 2024*
- [Patent Application] 추천 정보를 제공하는 전자 장치 및 그 동작 방법, Noseong Park, Yehjin Shin, **Jeongwhan Choi**, Hyowon Wi, KR Patent (Application No. 10-2024-0136316, Filed: 2024.10.08) *Oct 2024*
- [Patent Application] 이상 탐지 시스템 및 그 방법, Sewon Park, Minjung Kim, Noseong Park, Jinsung Jeon, **Jeongwhan Choi**, Jaehyun Park, KR Patent (Application No. 10-2024-006519, Filed: 2024.01.06) *Jan 2024*
- [Patent Application] Apparatus and Method for Processing Spatiotemporal Data Based on Graph Neural Controlled Differential Equations, Noseong Park, **Jeongwhan Choi**, Jeehyun Hwang, Hwangyong Choi, US Patent (Application No. 18/085,109, Filed: 2022.12.20) [\[link\]](#) *Dec 2022*
- [Patent Application] 그래프 신경 제어 미분 방정식 기반의 시공간 데이터 처리 장치 및 방법, Noseong Park, **Jeongwhan Choi**, Jeehyun Hwang, Hwangyong Choi, KR Patent (Application No. 10-2022-0151819, Filed: 2022.11.14) [\[link\]](#) *Nov 2022*
- [Patent Application] 学習時間常微分方程式基盤の協業フィルタリング推薦装置及び方法, Noseong Park, **Jeongwhan Choi**, Jinsung Jeon, JP Patent (Application No. 2021-215162, Filed: 2021.12.28) *Dec 2021*
- [Patent Application] Apparatus and Method for Collaborative Filtering Based on Learnable-Time Ordinary Differential Equation, Noseong Park, **Jeongwhan Choi**, Jinsung Jeon, US Patent (Application No. 17/563726, Filed: 2021.12.28) [\[link\]](#) *Dec 2021*
- [Granted Patent] 학습시간 상미분 방정식 기반의 협업 필터링 추천 장치 및 방법, Noseong Park, **Jeongwhan Choi**, Jinsung Jeon, KR Patent (Application No. 10-2021-0177928, Filed: 2021.12.13 | Granted No. 10-2881034, Granted: 2025.10.30) *Dec 2021*

[Granted Patent] 회귀 분석을 이용한 한자 난이도 측정 장치 및 방법, Suntae Kim, **Jeongwhan Choi**, Jiwoo Noh,
KR Patent (Application No. 10-2019-0141339, Filed: 2019.11.07 | Granted No. 10-2321045, Granted:
2021.10.28) Nov 2019

REFERENCES

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