Jinseok Seol

Website: dku-irdm.github.io
Email: theeluwin@gmail.com
GitHub: github.com/theeluwin
Blog: theeluwin.github.io

Research Interests

Machine learning & deep learning based information retrieval and data mining. Especially interested in:

- Context-aware Sequential Recommendation Model
- Explainable Recommender System
- Parameter-efficient Recommendation Model
- Large Language Model for Recommender System
- Cross-domain Image Retrieval
- Deep Learning Applications for E-commerce

Work Experience

- **Dankook University** — 2025.09 – current
  Assistant Professor
- **Korea Advanced Institute of Science & Technology** — 2024.09 – 2025.08
  Postdoctoral Researcher
- **Intellisys Corp.** — 2017.12 – 2020.08
  Senior Researcher
- **Stylewiki Corp.** — 2014.09 – 2015.12
  Senior Developer

Education

- **Seoul National University** — 2017.03 – 2024.08
  Ph.D. in Computer Science and Engineering
- **Yonsei University** — 2010.03 – 2017.02
  B.S. in Mathematics & Computer Science (*double major*)

Publications

[1] S. Park, H. Jeong, T. Djanibekov, G. Jeon, J. Seol, and J. Choi, On the relationship between populated regions and adversarial robustness in deep neural networks, The 25th IEEE International Conference on Data Mining (**ICDM** Short), 2025.

[2] J. Seol and J. Choi, Context-aware negative sampling for sequential recommendation, IEEE Access, 2025.

[3] J. Seol, Y. Ko, and S.-G. Lee, Parameter-efficiently Leveraging Session Information in Deep Learning based Session-aware Sequential Recommendation, IEEE Access, 2025.

[4] H. Na, M. Gang, Y. Ko, J. Seol, and S.-g. Lee, Enhancing Large Language Model Based Sequential Recommender Systems with Pseudo Labels Reconstruction, Findings of the Association for Computational Linguistics: EMNLP 2024 (**EMNLP** Short Findings), 2024.

[5] J. Seol, M. Gang, S.-g. Lee, and J. Park, Proxy-based Item Representation for Attribute and Context-aware Recommendation, The 17th ACM International Conference on Web Search and Data Mining (**WSDM**), 2024.

[6] H. Lee, J. Seol, S.-g. Lee, J. Park, and J. Shim, Contrastive Learning for Unsupervised Image-to-image Translation, Applied Soft Computing, 2024.

[7] S. Jang, H. Y. Kim, Y. Lee, J. Seol, S. Kim, and S. G. Lee, Deep learning for classification of high-end fashion brand sensibility, Journal of the Korean Society of Clothing and Textiles, 2022.

[8] J. Seol, Y. Ko, and S.-g. Lee, Exploiting Session Information in BERT-based Session-aware Sequential Recommendation, Proceedings of the 45th International ACM SIGIR Conference on Research and Development in Information Retrieval (**SIGIR** Short), 2022.

[9] J. Seol, S. Kim, S. Park, H. Lim, H. Na, E. Park, D. Jung, S. Park, K. Lee, and S.-g. Lee, Technologies for AI-Driven Fashion Social Networking Service with E-Commerce, Semantic Intelligence: Select Proceedings of ISIC 2022, 2023.

[10] H. Cho, J. Seol, and S.-g. Lee, Masked Contrastive Learning for Anomaly Detection, The 30th International Joint Conference on Artificial Intelligence (**IJCAI**), 2021.

[11] S. Kim, J. Seol, H. Lim, and S.-g. Lee, False Negative Distillation and Contrastive Learning for Personalized Outfit Recommendation, arXiv preprint arXiv:2110.06483, 2021.

[12] H. Cho, C. Ahn, K. Min Yoo, J. Seol, and S.-g. Lee, Leveraging Class Hierarchy in Fashion Classification, Proceedings of the IEEE/CVF International Conference on Computer Vision Workshops (**ICCV** Workshop), 2019.

[13] H. Lee, J. Seol, and S.-g. Lee, Style2vec: Representation Learning for Fashion Items from Style Sets, arXiv preprint arXiv:1708.04014, 2017.

[14] S. Choi, T. Kim, J. Seol, and S.-g. Lee, A Syllable-based Technique for Word Embeddings of Korean Words, Proceedings of the First Workshop on Subword and Character Level Models in NLP (**EMNLP** Workshop SCLeM), 2017.

[15] S. Choi, J. Seol, and S.-g. Lee, On Word Embedding Models and Parameters Optimized for Korean, 한국어정보학회: 학술대회논문집, 2016.

[16] J. Seol and S.-g. Lee, lexrankr: LexRank 기반 한국어 다중 문서 요약, 한국정보과학회 학술발표논문집, 2016.

Patents

- **The Automatic Recommendation System and Method of the Fashion Coordination** 1023070950000
  박성찬, 설진석, 안채민, 이상구
- **Electronic Device, Server and Method Thereof for Recommending Fashion Item** 1024649060000
  이한빛, 설진석, 이상구, 이형동

Teaching Experience

- **Teaching Assistant**
  Seoul National University
    – IT Entrepreneurship [M1522.002700] (2020 Fall)
    – Introduction to Databases [M1522.001800] (2017 Fall)
    – Digital Computer Concept and Practice [035.001] (2017 Spring)
    – Recommender Systems [4190.773] (2024 Spring)
- **Instructor**
  Dankook University
    – SW Convergence Coding II [529550] (2025 Fall)
    – Computer and Communication [478500] (2025 Fall)

Scholarships and Awards

- KFAS Scholarhip (Underground Scholarship in Mathematics) 2012.02 – 2015.02
- SW Maestro (Government Program, 2nd Tier Mentee) 2011.07 – 2012.07