

JUNGIN KIM

Seoul, Korea

[Homepage](#) ◇ [Google Scholar](#) ◇ [LinkedIn](#) ◇ [Github](#) ◇ [Blog](#)

RESEARCH INTERESTS

- **AI Ethics / Safety** – trustworthy AI with focus on watermarking for detecting AI-generated content
- **Hate Speech Detection** – detecting implicit and explicit toxic language
- **Recommender System** – personalized algorithms based on user behavior

EDUCATION

Yonsei University, Sep 2023 - Aug 2025
M.S. in Computer Science, Theory of Computation Lab
GPA: 4.01/4.30 | Advisor: Prof. Yo-Sub Han | Research Area: Code Watermarking

Sangmyung University, Mar 2017 - Feb 2022
B.S. in Computer Software, Network Data Science Lab
GPA: 3.92/4.50 | Advisor: Prof. Hyunchul Kim | Research Area: Hate Speech Detection

PUBLICATIONS

“K-ToPiC: Korean Dialect Toxicity Polishing with Curriculum Learning-based Span Detection”
Jungin Kim, Soohan Lim, Hyeseon Ahn, Sang-Min Choi, Yo-Sub Han
In Proceedings of the Korea Computer Congress: KCC 2025.

“Marking Code Without Breaking It: Code Watermarking for Detecting LLM-Generated Code”
Jungin Kim, Shinwoo Park, Yo-Sub Han
Master’s Thesis, arXiv preprint arXiv:2502.18851 [Under Review], 2025.([paper](#))

“TCProF: Time-Complexity Prediction SSL Framework”
Joonghyuk Hahn, Hyeseon Ahn, **Jungin Kim**, Soohan Lim, Yo-Sub Han
In the Association for Computational Linguistics: NAACL 2025.([paper](#))

“CodeComplex: A Time-Complexity Dataset for Bilingual Source Codes”
Seung-Yeop Baik, Joonghyuk Hahn, **Jungin Kim**, Mingi Jeon, Yo-Sub Han, Sang-Ki Ko
In Findings of the Association for Empirical Methods in Natural Language Processing: EMNLP 2025.([paper](#))

“SharedCon: Implicit hate speech detection using shared semantics”
Hyeseon Ahn, Youngwook Kim, **Jungin Kim**, Yo-Sub Han
In Findings of the Association for Computational Linguistics: ACL 2024.([paper](#))

PATENTS

Code Watermarking Method and Apparatus that Preserves Syntax Application
No. 10-2025-0021267 | Filed: Feb 19, 2025

Code Complexity Prediction Method and Apparatus Using Semi-supervised Learning Application
No. 10-2024-0150149 | Filed: Oct 29, 2024

WORK EXPERIENCES

Yonsei University, Aug 2023 - Present
Research Assistant, Theory of Computation Lab (Advisor: Prof. Yo-Sub Han)

- Conducted research on **syntax-preserving code watermarking techniques**, focusing on balancing functional correctness, detectability, and imperceptibility.
- Code Time Complexity Prediction: Developed datasets and explored a semi-supervised approach leveraging data augmentation, co-training, and symbolic analysis to enhance time complexity prediction for code.
- Hate Speech Detection: Research contrastive learning-based techniques for detecting implicit hate speech.

Alookso, Inc, Mar 2022 – Apr 2023
Data Analyst, Data Team

- Developed a **personalized news recommendation algorithm** for the main page.
- Developed the **My Map** algorithm, which recommends users with similar values based on their responses to survey questions and visually arranges them based on their proximity to each other.
- Analyzed users by segmenting them into cohorts based on the type of content they consumed prior to subscribing.

Korea Advanced Institute of Science and Technology (KAIST), Aug 2020 – Nov 2020
Research Assistant, Statistical Artificial Intelligence Lab (Advisor: Prof. Jaesik Choi)

- Developed an **officetel price prediction** model to enhance the efficiency of traditional appraisal methods.
- Preprocessed appraisal reports to extract key features for price prediction.
- Built ensemble models combining cost, comparison, and income approaches to improve real estate valuation accuracy.

Sangmyung University, Mar 2019 – Jul 2020
Research Intern, Network Data Science Lab (Advisor: Prof. Hyunchul Kim)

- Implemented a hate speech detection using Hierarchical Attention Network with 89% accuracy and visualized attention weights to highlight key sentences and words influencing detection, ensuring explainability.
- Performed attention-based error analysis and built a Telegram bot for real-time spam detection.

Joycity, Inc., Aug 2017 – Aug 2017
Data Analyst Intern, Kir Team (3on3 FreeStyle)

- Analyzed user trends, sales and community data, and competitor strategies to identify causes of user decline.
- Presented the findings to developers and proposed the implementation of summer break events.
- Recommended adjusting character abilities favored by churned users to improve retention.

AWARDS & HONORS

- | | |
|--|---------------------|
| • ADsP (Associate Data Analyst Certificate), Korea Data Agency | Apr 2023 |
| • Completed AIFEL AI Bootcamp, Modu Research Institute | Dec 2021 - Feb 2022 |
| • Completed, Recommender System Study, Modu Research Institute | Aug 2021 |
| • Graduated, Alice AI Track (1st Cohort) | Dec 2020 - Jun 2021 |
| • Awarded First Place, University Capstone Design Competition | Sep 2020 - Nov 2020 |
| • Awarded First Place, SK Future Industry Technology Startup Competition | May 2017 |

EXTRA INFORMATION, LANGUAGES

- Languages: Korean (native), English (conversational proficiency), TOEIC 860, OPIC IM2
- Programming Skills: Python, C, R, HTML, CSS, PyTorch, SQL, Scikit-learn, Git, Redash