RaeEun Lee

Integrating technical expertise with critical social inquiry to build responsible algorithmic systems.

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Education

Sogang University, Seoul, South Korea   *Mar. 2011 – Aug. 2015*
B.S. in Computer Science and Engineering
B.A. in Cultural Criticism (double major)

- Graduated with **Magna Cum Laude** honors
- Department Rank: 1/39 (GPA 3.68/4.3)
- Awarded the Korea National Scholarship for academic excellence

Technical & Research Skills

- **Machine Learning & Data Science:** Recommendation systems; collaborative filtering; content-based and deep learning models; bandit/explore-exploit methods; user behavior modeling; online/offline evaluation; experiment design; A/B testing; metric optimization and analysis
- **LLM & NLP:** Function calling design; prompt engineering; retrieval and context construction for recommendation tasks
- **Engineering & Systems:** Data engineering; real-time log collection and processing; distributed processing; large-scale system and API design; MLOps (model deployment, pipeline automation)
- **Tools & Tech:** Python, C++, Kubernetes, Docker, Kafka, Airflow, Redis, MongoDB, Git, Linux

Work Experience

Kakao — AI Recommendation   *SW/ML Engineer   Sep. 2019 – Present*

- Developed and optimized large-scale recommendation systems for high-traffic Kakao services including *Daum* (online news portal), *KakaoTalk Gift* (E-commerce gifting platform), and *KakaoPage* (digital content platform); worked on modeling, user behavior analysis, log pipeline design, online/offline evaluations, and A/B testing
- Improved key engagement and quality metrics (e.g., CTR, CVR, dwell time, diversity) through data-driven experimentation and model refinement
- Led personalization projects, including *Daum*, *Brunch* (content publishing platform), and *KakaoTalk Shortform* (shortform media platform); managed a 5-member team and delivered stable operation of 80+ large-scale APIs
- Designed function-call structure and developed LLM-based recommendation features for an AI shopping chatbot

Samsung SDS — Alphalaw   *SW/ML Engineer   Dec. 2017 – Jun. 2019*

- Developed ML-based contract analysis system; enhanced tokenization using domain-specific vocabulary, and evaluated model performance on legal text classification tasks
- Prototyped new product ideas through market analysis, user interviews, and experimental validation in PoC settings

Samsung SDS — AI Platform Team　　　　　　　　　*SW/ML Engineer*　*Aug. 2017 – Dec. 2017*

- Built a semi-automatic labeling tool for supervised learning and implemented an image data preprocessing module

Samsung SDS — SERP Team　　　　　　　　　　　*SW Engineer*　*Aug. 2015 – Aug. 2017*

- Managed and developed the QM part of the ABAB-based SAP system at *Samsung Heavy Industries*
- Designed and delivered in-house algorithm training sessions for employees, strengthening problem-solving and programming skills

Projects

Author — 코딩으로 세상을 바꿀 수 있다면 (If We Could Change the World with Coding)　　*Jul. 2023*

- Authored an educational book for teenagers on computing history, programming principles, diverse IT career paths, tech accessibility, and ethical/environmental perspectives of AI, incorporating female role models (e.g., Ada Lovelace, Grace Hopper) and challenging gender stereotypes in tech
- Delivered a book talk and mentoring session at Seosan Girl's High School, encouraging students to explore IT-related careers

Mentor, GHC 22 Open Source Day　　　　　　　　　　　　　　　　　　*Sep. 2022*

- Mentored participants contributing to open source projects during the event

Coding Class for Elementary Students (Employee Children Program)　　　　　　*2016*

- Designed and delivered Scratch-based coding classes for elementary school students (children of employees), fostering interest in computational thinking

Sogang University — ACM Programming Contest Committee　　　*Nov. 2012, Nov. 2013*

- Served as a problem setter and judge for the university's ACM programming contest, creating and reviewing algorithm problems for difficulty, clarity, and test data quality

Patents

Method, User Terminal, and Server for Displaying Chat Room Based on Location Information

KR Patent No. 10-2022-0165346 (Registered); JP Patent No. 2023-198900 (Registered); US Application No. 18/520,236 (Pending)

Awards

- *Google Code Jam to I/O for Women 2018:* Ranked 181st (invited to Google I/O 2018)
- *Google Code Jam to I/O for Women 2017:* Ranked 58th (invited to Google I/O 2017)
- *ACM-ICPC Daejeon Regional 2013:* 10th place (Official Korean Regional Contest)
- *ACM-ICPC Daejeon Regional 2012:* 11th place (Official Korean Regional Contest)