

YUJIN CHUNG (YOA)

Portfolio: <https://yuujinjeong.github.io> / GitHub: <https://github.com/YuujInJeong/>
yuujin010917@khu.ac.kr | www.linkedin.com/in/yujin-yoa-jeong

EDUCATION

Kyung Hee University

Seoul, Korea

B.S. in Industrial and Management Systems Engineering

Mar 2021 - Feb 2026 (Expected)

- Relevant Coursework: Machine Learning, Data Mining, Artificial Intelligence, Supply Chain Management, Financial Engineering, Data Science, Management Information Systems, Computer Simulation, Industrial Engineering Algorithms
- Areas of Interest: AI/ML Research, Software Development, Performance Marketing, Data Science

RESEARCH EXPERIENCE

Undergraduate Researcher

Jul 2025 - Present

Laboratory for Advanced Nano Technologies (LANT) &
Industrial Artificial Intelligence (IAI), Kyung Hee University

LANT Research Activities |

- Completed foundational AI/ML training program covering deep learning architectures and optimization technique
- Developed and trained custom classifiers for nano-material image analysis, achieving improved accuracy in defect detection

IAI Research Activities |

- Conducting research on Small Language Model (SLM) integrated with Retrieval-Augmented Generation (RAG) systems for domain-specific applications
- Led website improvement project for Korean Institute of Industrial Engineers (KIIE), implementing enhanced UI/UX and accessibility features
- Active participant in Graph Neural Networks (GNN) research study group, exploring applications in network analysis and recommendation systems

Ongoing Research Projects

GNN-Based Next-Step Prediction for Assembly Tasks

Sep 2025 - Present

- Developing next-step prediction model for assembly processes using image sequences and manuals
- Goal: Generate physically executable next actions by validating spatial accessibility and prerequisite conditions

- Implementing Graph Neural Network (GNN) to model component relationships and assembly states
- Designing lightweight verifier to enforce physical constraints beyond simple text/image generation
- Key Innovation: Bridging the gap between AI-generated instructions and physical feasibility

Accessibility Developer Tool for Visually Impaired Users

June 2025 - Present

- Developing automated accessibility testing tool for mobile applications
- Submitted to KSC (Korea Software Congress) 2025 Conference (Submission Deadline: Sep 13, 2025)
- Creating framework to detect and report accessibility violations in app interfaces
- Aim: Improve digital inclusion by automating accessibility compliance checks

WORK EXPERIENCE

Teaching Assistant

2024

Dongbuk High School, Seoul

- Taught Artificial Intelligence curriculum to high school students (AI Track 2)
- Developed and delivered curriculum materials for algorithm and AI fundamentals

Content Developer & Web Developer (Freelance)

2023 - Present

YouTube Channel - Hong Arin

- Lead content planning and development for educational YouTube channel
- Conceptualize and produce engaging video content tailored to target audience demographics
- Manage content calendar and optimize video performance through data analytics

Freelance Web Developer

- Provide end-to-end web development services for 5+ client projects across various industries
- Specialize in responsive website design, frontend/backend implementation, and deployment
- Technologies: React, Next.js, Node.js, Python (Flask/Django), MySQL, AWS
- Maintain long-term client relationships through reliable delivery and post-launch support

SELECTED PROJECTS

Dongwon x KAIST AI Competition Project

2025

- Developed demand forecasting model using "A Survey of Useful LLM Evaluation" 4-step framework
- Generated customer personas through LLM-based analysis and integrated socioeconomic trend data
- Combined persona-driven forecasting with demographic and market analysis for enhanced prediction accuracy

Matajo - Cloud Native Service Platform

2025

- Developed cloud-native service as part of Kakao Tech Bootcamp and launched as startup venture
- Led product planning, full frontend development, marketing strategy, and UX research
- Conducted user testing and iterated product features based on feedback
- Project Link: <https://disquiet.io/product/마타조-matajo>

POLION - Civic Engagement Platform

2024

- Designed innovative platform connecting politicians and citizens through direct stakeholder interviews
- Conducted needs assessment meetings with elected officials to identify feasible features and pain points
- Proposed practical solutions for streamlined constituent communication and policy feedback mechanisms
- Implemented real-time engagement features tailored to politicians' workflows
- Awarded Innovation Prize at KHcreative StartUP Dream 2.0 Competition

Seoul Linear Park Location Optimization

2024

- Analyzed insufficient connectivity between Seoul districts and proposed linear parks as solution
- Applied clustering algorithms to identify candidate regions and node optimization to maximize park impact
- Identified optimal locations for linear park installations to enhance connectivity and promote commercial development
- Hosted by Seoul Metropolitan Government (Aug 2024 - Sep 2024)
- Awarded Excellence Prize at Seoul Big Data Campus Competition

LAID - Line Drawing Automation Tool

2023

- Developed automated line drawing tool based on Coherent Line Drawing algorithm
- Implemented using Python, OpenCV, and Streamlit for user-friendly web interface
- Deployed as part of KHUDA 6th Deploy Session project
- GitHub: <https://github.com/YuujInJeong/LAID>

LINK - Chrome Extension for Link Management

2023

- Built personal link repository as Chrome extension using JavaScript
- Designed intuitive UI/UX for efficient bookmark management and categorization
- GitHub: <https://github.com/YuujInJeong/LINK>

Finonotii - Youth Financial Literacy AI Chatbot

2024

- Developed LLM-based financial education chatbot for teenagers in collaboration with high school students
- Participated in youth-focused hackathon to create accessible financial literacy tool
- Integrated conversational AI for personalized financial guidance tailored to teen learning styles
- Advanced to finals (34th place) at SeSac Hackathon

HONORS & AWARDS

2025	Dongwon x KAIST AI Competition	Grand Prize (1st Place)
2025	Dangeun Builder's Camp	Special Prize (2nd Place)
2025	Hyundai Mobis X KHUDA ML Conference	1st Prize (Basic Track)
2025	Hyundai Mobis X KHUDA ML Conference	Excellence Award (Advanced Track)
2024	CAAS Academic Conference	Grand Prize (₩3,000,000)
2024	KHreative StartUP Dream 2.0	Innovation Prize
2024	KVS Startup Support Program (10th)	Promising Team (₩5,000,000)
2024	KHU Valley Program (12th) - Advanced Track	Encouragement Award
2024	Employment and Labor Public Data Competition	Encouragement Award
2024	Seoul Big Data Campus Competition	Excellence Award
2024	Gyeongnam New Business Idea Competition	Excellence Award
2023	Changwon Big Data Competition - Idea Track	Grand Prize (1st Place)
2023	KVS Startup Support Program (8th)	Growth Team (₩3,000,000)

2023	KHU Valley Program (10th) - Beginner Track	Encouragement Award (₩500,000)
2023	Seoul Metropolitan Government Commendation	Volunteer Service Division

PUBLICATIONS & CONFERENCE PAPERS

1. Jeong, Y., Oh, J., Oh, C., & Han, J. (2025).
Accessibility Developer Tool for Mobile Applications Targeting Visually Impaired Users.
Submitted to Korea Software Congress (KSC) 2025. [Under Review]
2. Choi, I., Kim, G., Kim, D., Seo, Y., Yang, D., & Jeong, Y. (2025).
Analysis of Causal Risk Transfer Mechanisms in Major Metal Futures and Cryptocurrency
Markets Using PCMCI+ Algorithm.
2025 Fall Conference of the Korean Institute of Industrial Engineers.
3. Choi, I., Jeong, Y., Kim, D., Lee, J., Jung, Y., & Kim, W. C. (2024, January).
Analyzing South Korea's Household Finance via Panel Data.
Paper presented at 2023 Winter Conference of the Korean Data Analysis Society.
4. Choi, I., Jeong, Y., Kim, D., Lee, J., Jung, Y., & Kim, W. C. (2023, November).
Tracking Changes in Financial Literacy: Insights from the Korean National Survey (2014-2022).
Paper presented at 2023 Fall Conference of the Korean Institute of Industrial Engineers.
5. Choi, I., Jeong, Y., Kim, D., Lee, J., Jung, Y., & Kim, W. (2023).
Discovery of Financial and Welfare-related Characteristics of Koreans Based on Statistical
Data Analysis - Based on Household Finance and Welfare Survey.
2023 Fall Conference of the Korean Society of Industrial and Management Systems.
6. Choi, I., Kim, D., Park, M., Ahn, S., Lim, S., Lee, D., Jeong, Y., & Kim, W. (2023).
Analysis and Prediction of Risk Boundary Transfer in Industrial Metals and Core Minerals
through Information Entropy-based Temporal Graph Topology and Deep Learning Techniques.
2023 Spring Conference of the Korean Data & Information Science Society.

LEADERSHIP & EXTRACURRICULAR ACTIVITIES

KHUDA (Kyung Hee University Data Analysis & AI Club)	2022 - Present
- 8th Generation: Head of External Relations, NLP Track Leader (2025)	
- 7th Generation: President, Data Visualization Session Leader (Fall 2024)	
- Organized and led KHUDA Datathon 2, KHUTHON Hackathon	
- 6th Generation: President, Deploy Session & ML Session Leader (Spring 2024)	
- Organized and led KHUDA Datathon 1	
- Secured corporate sponsorship and managed club operations	
- 5th Generation: Head of Public Relations, Data Business Track Leader (Fall 2023)	
- 4th Generation: Head of Public Relations, Finance Track Leader (Spring 2023)	

DADINGCODING (University Student Coding Education Volunteer Club) 2021 - Present

- Founder and President (1st - 8th Generation, 41 months)
- Authored Python Basic, Advanced, and AI Fundamentals textbooks
- Provided free coding education to 100+ university students in Seoul/Gyeonggi area
- Managed Instagram and KakaoTalk channels for recruitment and community engagement
- Awarded Commendation by Seoul Metropolitan Government for Social Service (2023)

CAPTIMA (Industrial Engineering Department Club) 2021 - 2025

- Grade Representative (Spring 2024)
- Vice President (2023)
- Established Instagram presence and managed alumni communications
- Organized Homecoming event (first post-COVID gathering)

ADDITIONAL ACTIVITIES & PROGRAMS

Kakao Cloud Native Jeju 2nd Bootcamp Oct 2024 - Apr 2025

- Intensive training program on MSA architecture and backend development
- Government-funded K-Digital Training program

Perplexity Campus Strategist Dec 2024 - Mar 2025

- Created promotional video content and participated in APAC meetings
- Developed marketing strategies in collaboration with Perplexity team

Naver AI Ambassador - AI RUSH Jul 2024 - Sep 2024

- Developed 'ADcine', an ADHD-specific time management app using Naver Cloud Platform
- Led ideation presentation and development phases

SW Maestro Supporters (7th Generation) Apr 2024 - Dec 2024

- Created online content (YouTube videos, blog posts, card news)
- Video: <https://youtube.com/shorts/VISl2Tx3RZQ?feature=shared>

KHUMILY External Relations Supporters (7th & 8th) Mar 2022 - Feb 2024

- Team Leader (2022)
- Wrote promotional blog posts (4 per month), managed Instagram and YouTube
- Planned donor and student events (3 events organized)

VOLUNTEER EXPERIENCE

SSIAT Educational Volunteer Club Mar 2016 - Dec 2019

- President, Ansan City Small Library
- Provided English education to underprivileged children in Ansan City
 - Developed creative educational content for children

UNICEF Unifriends (4th Generation) Mar 2022 - Dec 2022

- Promoted UNICEF events through Instagram stories
- Participated in metaverse charity events

Foreign Student Buddy Program

2021 - 2023

- Assisted international students with campus life and Korean culture adaptation
- Participated in Spring 2021, Summer 2021, Winter 2022, Spring 2023 semesters

TECHNICAL SKILLS

Programming Languages

- Python, JavaScript, SQL

Machine Learning & AI

- PyTorch, TensorFlow, scikit-learn
- Deep Learning, Graph Neural Networks (GNN), Computer Vision, NLP

Web Development

- Frontend: React (TypeScript), Next.js, HTML/CSS, Streamlit
- Backend: FastAPI, Flask, Node.js (Express)
- Database: MySQL, PostgreSQL

Cloud & DevOps

- AWS, Google Cloud Platform (GCP), Naver Cloud Platform (NCP)
- Docker, Kubernetes, Git, GitHub Actions

Tools & Collaboration

- Notion, GitHub Projects, Slack, Figma

CERTIFICATIONS & LANGUAGE PROFICIENCY

- OPic (Oral Proficiency Interview): IH Level (Dec 2024)
- TEPs : 324
- Korean: Native
- Driver's License
- Big Data Analysis Engineer, HRDK, 2025