Hyunwoo **Park**

AI Researcher, Data Scientist

405, 10-7, Gwangun-ro 7-gil, Nowon-gu, Seoul, Republic of Korea

(+82) 10-6381-9680 | bhw119@gmail.com | bhw119

"Precision in every data point."

Kwangwoon University — *Seoul, S.Korea*

B.S. in Information Convergence, Data Science — *Mar. 2020 - Feb. 2026 (Expected)*

- **Major GPA: 4.31 / 4.5** (Cumulative GPA: 4.13 / 4.5)

Honors & Awards

Domestic & Academic

Sep. 2025	**Encouragement Award (3rd Place)**, Graduation Project Exhibition	*Seoul, S.Korea*
Mar. 2025	**Academic Excellence Scholarship**, Kwangwoon University	*Seoul, S.Korea*
Dec. 2024	**Grand Prize (Poster Session)**, MATCH-UP Competition	*Seoul, S.Korea*
Dec. 2024	**Grand Prize (Practical Report)**, MATCH-UP Competition	*Seoul, S.Korea*
Sep. 2024	**Academic Excellence Scholarship**, Kwangwoon University	*Seoul, S.Korea*
Sep. 2024	**Full Tuition Scholarship (1st class)**, Kwangwoon University	*Seoul, S.Korea*
Sep. 2024	**Dean's List**, Kwangwoon University	*Seoul, S.Korea*
Sep. 2023	**Academic Excellence Scholarship**, Kwangwoon University	*Seoul, S.Korea*

Internship

PADA LAB (Process Automation & Data Analytics Lab) — *Seoul, S.Korea*

Undergraduate Research Intern — *Sep. 2024 - Present*

- Conducting research on the cognitive mechanisms of online review helpfulness across four diverse platforms (Amazon, Booking.com, Audible, Coursera) using 400K+ datasets.
- Proposed a predictive framework based on **Dual-Process Theory**, distinguishing between Systematic (e.g., depth, breadth) and Heuristic (e.g., rating deviation, recency) processing cues.
- Implemented advanced NLP pipelines to extract features, utilizing **RoBERTa** for emotional arousal analysis and **NMF (Non-negative Matrix Factorization)** for measuring topic breadth.
- Applied **PLS-SEM** for latent construct validation and developed a **Multilevel ZINB (Zero-Inflated Negative Binomial)** model to robustly handle zero-inflated count data and item-level heterogeneity.
- Identified key findings: (1) Systematic cues consistently drive helpfulness across all domains, whereas (2) Heuristic cues exert stronger influence in experience-goods platforms (e.g., Audible).
- Authored a paper titled "Dual-Process Modeling of Online Review Helpfulness", currently under review at *Electronic Commerce Research and Applications*.

Publications

Dual-Process Modeling of Online Review Helpfulness: A Multi-Platform Analysis using PLS-SEM and Multilevel ZINB — *Electronic Commerce Research and Applications (SCIE)*

Co-Author (Under Review) — *Submitted Dec. 2025*

Minsu Cho, **Hyunwoo Park**, Heeryeong Park, Sujin Jeong, Pilkyu Jeong

Development and Evaluation of 'Lec-Q': A Two-Way Learning Support Service to Enhance Understanding of Online Lectures — *HCI Korea 2026*

First-Author (Submitted) — *Submitted Dec. 2025*

Hyunwoo Park, SeongYun Cheon, AhReum Yoo, Kyudong Park

Proposal of Neuro-Symbolic AI-based Dark Pattern Detection and User Assistance System in Elderly Kiosk Environments — *ICROS 2025 (Institute of Control, Robotics and Systems Annual Conference)*

Co-Author — *Jun. 2025*

Sujin Jung, Soyoung Park, **Hyunwoo Park**, Oh MinJin

Development of 'PHOTATO', a photo analysis travel recommendation system — *Proceedings of HCI Korea 2025*

Co-Author — *Feb. 2025*

HaKyeong Lee, HanBee Ko, EunJin Joo, **Hyunwoo Park**, SeongYun Cheon, SeoYeon Jeon, YongMin Kim, Wonjoon Kim

Projects

Lec-Q: AI-based Two-Way Learning Support Service

Seoul, S.Korea

Project Lead & Main Developer (First Author) *Sep. 2025 - Dec. 2025*

- Developed a real-time interactive educational platform using **WebRTC** to resolve communication gaps in online lectures.
- Implemented a **RAG (Retrieval-Augmented Generation)** based AI chatbot system that provides immediate responses based on lecture materials, featuring a 2-step verification by instructors.
- Designed a visual distribution system that automatically captures and shares the instructor's handwriting notes to reduce students' cognitive load.
- Built a data analytics dashboard for instructors, visualizing time-stamped question distribution and student concentration levels.
- Authored and published the paper "Development and Evaluation of 'Lec-Q"' as the **First Author**, validating the system's effectiveness.

Neuro-Symbolic AI-based Dark Pattern Detection Service

Seoul, S.Korea

Full Stack Developer & AI Researcher (Graduation Project) *Jan. 2025 - Sep. 2025*

- Developed a comprehensive solution (Web & Chrome Extension) to detect deceptive designs (Dark Patterns) using **Neuro-Symbolic AI**, combining BERT-based deep learning with logical reasoning.
- Led the full-stack development using **React, Node.js, and Flask**, handling AI model serving, **MongoDB** integration, and Chrome Extension implementation.
- Expanded the research to offline environments (Kiosk) to assist elderly users, focusing on Human-Robot Interaction (HRI).
- Authored and published a paper at **ICROS 2025** (HRI Field): "Proposal of Neuro-Symbolic AI-based Dark Pattern Detection and User Assistance System in Elderly Kiosk Environments".

PHOTATO: Photo Analysis-based Personalized Travel Recommendation System

Seoul, S.Korea

Team Lead & Backend Developer (Co-author) *Nov. 2024 - Feb. 2025*

- Led the development of a travel recommendation service that suggests destinations based on visual features of user-uploaded photos using **CNN (Convolutional Neural Networks)**.
- Engineered the backend logic for route optimization by applying the **TSP (Traveling Salesperson Problem)** algorithm to generate efficient travel paths.
- Conducted comprehensive user research (Surveys, IDIs) and derived UX insights using Personas and Journey Maps to define core features.
- Authored and published the paper "Development of 'PHOTATO': A Photo Analysis Travel Recommendation System" in **Proceedings of HCI Korea 2025**.

Teaching Experience

D.Lab Code Academy

Seoul, S.Korea

Coding Instructor *Dec. 2024 - May 2025*

- Instructed elementary school students in fundamental coding concepts and computational thinking.
- Facilitated hands-on programming activities to foster problem-solving skills and logical reasoning for young learners.

Kwangwoon Artificial Intelligence High School

Seoul, S.Korea

Lead Instructor & Curriculum Developer *Jan. 2024 - Nov. 2024*

- Collaborated with school teachers starting in January to design the syllabus and create teaching materials for the Python special course.
- Conducted the 1st semester course (10 sessions, Mar. 07 - Jul. 12) covering Python fundamentals (Control Flow, Functions, Data Structures) and Data Analysis libraries (Matplotlib, Numpy, Pandas).
- Selected as the instructor for the 2nd semester continuously in recognition of excellent teaching evaluations and student feedback.
- Conducted the 2nd semester course (10 sessions, Sep. 25 - Nov. 29) focusing on Web Crawling, Big Data Analysis (Text mining, Geo-spatial, Sentiment Analysis, Recommendation Systems), and supervising final team projects.

Extracurricular Activity

CHIC (Data Science & AI Academic Club)

Seoul, S.Korea

Core Member & Academic Mentor *Sep. 2023 - Feb. 2026 (Expected)*

- Provided academic mentoring for 2nd and 3rd-year Data Science majors, focusing on core coursework and problem-solving (Mar. 2025 - Jun. 2025).
- Conducted intensive Deep Learning & AI studies, covering theoretical foundations and model architectures (Dec. 2023 - Feb. 2024).
- Participated in regular academic sessions on Python programming, data analysis, and machine learning algorithms.

Sowon (SW Volunteer Corps)

Seoul, S.Korea

Team Leader of Curriculum Div. & Lead Instructor *Sep. 2023 - Feb. 2025*

- Served as the Lead Instructor at Kwangwoon Artificial Intelligence High School, teaching AI and software concepts for one year.
- Participated as a Mentor for the 'And Center' Youth Hackathon to guide student projects (Nov. 2023, Nov. 2024).
- Conducted coding education volunteering at Seoul Jeongmin Special School (Dec. 2023 - Mar. 2024).

Student Council

Seoul, S.Korea

Student Council Member & Department Representative *Mar. 2024 - Feb. 2026*

- Represented the department at the Freshman Orientation, delivering a presentation on the academic curriculum and career paths (Feb. 2025).
- Provided consultation and Q&A sessions for undeclared majors regarding major selection and educational roadmap.