Seungjun Chu

School of Industrial and Management Engineering, Korea University, Seoul, South Korea

Phone: +82-10-5797-0428 | E-mail: sjchu@korea.ac.kr

Education

- **Korea University**, Seoul, South Korea
  Bachelor of Engineering in Industrial and Management Engineering (Expected 2029)
  Academic Honors: Semester High Honors (Spring 2025); Semester Honors (Fall 2025)

- **Busan Il Science High School**, Busan, South Korea
  High School Diploma, Graduated Feb. 2025

Research Experience

- LISP Lab, Thayer School of Engineering, **Dartmouth College**
  Undergraduate Researcher (Feb. 2026 – Present)

- SIA Lab, School of Industrial and Management Engineering, **Korea University**
  Undergraduate Researcher (Dec. 2025 – Present)

- Jaehoon Jeong's Group, School of Business Administration, **University of Seoul**
  Undergraduate Researcher (Aug. 2025 – Present)

- Nicolas Federico Martin's Group, College of Agricultural, Consumer and Environmental Sciences, **University of Illinois Urbana-Champaign**
  Research Intern (Dec. 2023 – Aug. 2024)

- Youngwoon Woo's Group, Department of Applied Software Engineering, **Dong-Eui University**
  Research Intern (Mar. 2023 – Feb. 2024)

- Kyungmin Kim's Group, Software Education Center, **Pusan National University**
  Research Intern (Mar. 2022 – Feb. 2023)

Policy & Applied Research

- **Seoul Metropolitan Government** (commissioned policy research via University of Seoul)
  Research Assistant (2025)
  – Empirical modeling and report writing using large-scale administrative data

Working Papers

- Weakly-Supervised Semantic Segmentation — Under review, European Conference on Computer Vision (ECCV 2026) (co-first author)

- Healthcare accessibility modeling — Collaboration with University of Seoul; in preparation for submission to *Management Science* (first author)

- Wafer defect classification — Currently developing and modeling a deep learning pipeline for wafer map defect classification (first author)

Journal Papers

- S. Chu and K. Kim, "Analysis of Determinants of 5 Major Crimes in Seoul using Spatial Big Data," *Journal of the Korea Institute of Information & Communication Engineering*, vol. 28, no. 4, pp. 369–378, Apr. 2024. DOI: 10.6109/jkiice.2024.28.4.369

Conference Presentations

1. S. Chu, "Application of Geographically Weighted Principal Component Analysis to Domestic Administrative Data," *Proc. 2024 Spring Conf. Korea Inst. of Information and Communication Engineering*, Oral Session, 2024.

2. S. Chu, Y. Koh, M. Kim, and T. Kim, "Analysis of Collaborative Research Trends in the Journal of the Korea Institute of Information and Communication Engineering using Co-authorship Network," *Proc. 2024 Spring Conf. Korea Inst. of Information and Communication Engineering*, Oral Session, 2024.

3. S. Chu, "Comparison of the Performance of Regression Models for Analyzing Determinants of 5 Major Crimes," *Proc. 2023 Fall Conf. Korea Inst. of Information and Communication Engineering*, Oral Session, 2023.

Scholarships and Awards

Selected Scholarships

- Presidential Science Scholarship (Full tuition and academic grant for 4 years)

- Fourth Industrial Revolution Gifted Scholarship (2023)

- Busan Machinery Industry Cooperative Scholarship (2022)

Selected Awards

- Talent Award of Korea – Deputy Prime Minister and Minister of Education Award

- Finalist, 2024 Regeneron International Science and Engineering Fair (ISEF)

- Outstanding Student Paper Award (2 papers), 2024 Spring Conference, KIICE

- Outstanding Student Paper Award, 2023 Fall Conference, KIICE

- Grand Award, 2023 National Research and Education (R&E) Project Presentation Competition (Minister of Science and ICT Award)

- Excellence Award, 69th National Science Contest – Industry & Energy Division (Minister of Science and ICT Award)

- Grand Award, 2023 National SW · AI Education Essay Contest (Minister of Science and ICT Award)

- Grand Award, 39th National Youth Science Exploration Competition (Minister of Science and ICT Award)

- Gold Award, 21st Korea Science and Engineering Fair (KSEF)

- Gold Award, 14th National Creative Problem-Solving Competition

- Silver Award, 25th National Student Statistics Utilization Competition

- Excellence Award, 2025 Data Creator Camp

- Excellence Award, 2023 AI Hub Data Utilization Idea Contest

- Excellence Award, 2023 Hello New World Hackathon

- Special Award, 2022 National Data Analysis and Application Contest – Analytics Division

- Excellence Award, 5th National Educational Public Data Analysis and Utilization Competition

- Silver Award, 2022 National Youth Science Fair

- Encouragement Award, 2022 National Research and Education (R&E) Project Presentation Competition

- KFICT President's Award, 2025 National AI · Digital Native Debate Competition

- A-Grade Outstanding Idea Selection, 2025 Innovation Demand Idea Competition, Public Procurement Service (PPS), Korea

- Best Project Award, 2025 SNU–KU–Yonsei Industrial Engineering Academic Exchange (Seoul National University, Korea University, and Yonsei University)

- Top Award, 60th Busan Science Exhibition – Industry & Energy Division

- Excellence Award, 2022 Busan Future Scientist Award – Mathematics Division

- Grand Award, 2022 Busan Youth Scientific Exploration Competition

- Grand Award, 38th Busan Youth Scientific Exploration Competition

Selected Activities and Engagements

- Invited Mentor, 2025 Roundsquare Prize Youth Food-Tech Competition
    – Invited as one of three mentors alongside a faculty member (Kyung Hee University) and a senior researcher (KISTI)
    – Research mentorship and technical guidance for award-winning teams
    Hosted by the Korea Foundation for Science and Creativity

- Participant (Youngest), 2025 Asia-Pacific Internet Governance Academy (APIGA)

- Invited Mentor, 2025 Youth Scientific Expedition, hosted by the Ministry of Science and ICT and the Korea Foundation for Science and Creativity

- Supporter, 2024 Global ICT Standards Conference

- Student Representative, JENESYS Korea–Japan Youth Delegation (5th Cohort), hosted by the Ministry of Foreign Affairs of Japan, 2024

- Student Representative, 2024 Youth Global Science Expedition (Western U.S.)

- Participant, 2023 Taiwan International Academic Delegation (Taipei Municipal Chien Kuo High School, Taiwan)

Public Lectures

- Invited Speaker, Outstanding Performance Presentation — 2025 Science & Technology Talent Networking Party, hosted by the Ministry of Science and ICT and the Korea Foundation for Science and Creativity (Science and Technology Convention Center, Seoul)

- Invited Speaker, 2021 Busan Education Expo – Shaping the Future, hosted by the Busan Metropolitan Office of Education (BEXCO, Busan)

- Student Speaker, 2018 SW Education Festival – 100°C Youth Talk (BEXCO, Busan)

Media Appearances

- Guest Interviewee, BeFM Busan Worldwide – "The Interview" Segment (FM 90.5 / 103.3), Jan. 2, 2025 (Thu)