

Kyuhwan Shim

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[Office] Institute of Computer Technology, Room 414 (CRAIC), Seoul Nat'l University

INTERESTS	Vision-Language Model	
EDUCATION	Sogang University , Seoul, Korea ▪ B.S. in Computer Science (RecSys A+, ML A0) Mar 2019 – Aug 2024 Chungnam Science High School , Kongju, Chungnam, Korea ▪ H.S.D. in Informatics Mar 2016 – Feb 2019	
WORK EXPERIENCE	AI Researcher, Seoul Nat'l U. AIIS Seoul, Korea Mar 2024 – Presents ▪ [Team Tidyboy@RoboCup'24] General Purpose Service Robot & Human-Robot Interaction Machine Learning Engineer Intern, Nota Inc. Seoul, Korea Mar 2023 – Aug 2023 ▪ [Vision] Develop YOLO-based AI models for Intelligent Traffic System ▪ [Edge AI] Inference Traffic Data Extractor Model on NVIDIA AGX Orin (at Deepstream 6.1.) ▪ [MLOps/DevOps] Construct ML Pipeline on kubeflow, AWS data lake, Git Action Senior Designer, OCONNECT Ulsan, Korea Jun 2020 – Feb 2023 ▪ Student Venture which makes Easy-Insert Socket, OneStep (CEO Hyeong-Jun Bang) [R&D Didimdol] ▪ [Achievement] Winner @ James Dyson Award '22 KR, Ulsan Collegiate Startup Competition	
RESEARCH EXPERIENCE	Undergraduate Student Researcher, BI Lab , IPAI@Seoul Nat'l U., Korea Dec 2023 – Aug 2024 Mentee, Lee Lab , Data Science@Seoul Nat'l U. & Google Korea Dec 2023 – Feb 2024	
MILITARY DUTY	Yeongdong Firestation , Yeongdong, Chungbuk, Korea Aug 2020 – Apr 2022	
AWARDS	ExploreCSR Workshop 2nd Place , Data Science Graduate School @Seoul Nat'l U 2024 Grand Prize (1st Place, Mayor of Gangseo-gu Office) , Gangseo-gu Office ▪ [PPT] Risk Rating Model for Small Business Owners using the Credit Rating Model 2023 Grand Prize (Nat'l Information Society Agency President Award) , NIA, Minister of Sci. & Tech. ▪ BIGCONTEST Data Analytics Innovation League 2022 Grand Prize (Runner-Up) ▪ [PPT] [PRJ] Carbon Footprint Calculator & Eco-friendly JEJU travel route RecSys. 2022 Excellence Award , Chung-nam Science Fair (64th) ▪ [Poster] Solar Power System considering the impact of Wave Height 2018 Special Prize , Chung-nam Science Fair (63th) ▪ [Poster] Laser Cutting Machine Using Mechanum Wheels 2017	
SCHOLARSHIPS	Sogang Alumni Scholarship , Sogang University Alumni ▪ 1-Semester full scholarship - General (2020), Startup (2022) ▪ Priest Villarreal Memorial (2023-2024) [Sponsored by SMILEGATE] Albatross Scholarship , Sogang University [talents in SW Fields] 2019 Myunghak Scholarship , Kongju Myunghak Scholarship 2017 Samsung Dream Scholarship , Samsung Dream Scholarship Foundation 2016	
ACTIVITIES	[Samsung AI Challenge / SAIT] Camera-Invariant Domain Adaptation Challenge ▪ [DACON] Domain Adaptive Semantic Segmentation Alg. Robust to Camera Characteristic Changes ▪ [Link] Top 30 with SePiCo & Joined Talent pool of Samsung Electronics Sep 2023- Sep 2023 [LG Aimers / LG AI Research]: Online AI Education & Hackathon ▪ [DACON] Smart Factory Product Quality Status Classification AI Online Hackathon ▪ Phase 3 Online Hackathon Finalist, Phase 2 Top 30 (3% for 891) Jan 2023- Mar 2023 INSIGHT , Data Science Group @ Sogang Business School Sep 2022- Jun 2023 Co-Founder, Chief Design Officer, Programmer , OCONNECT Jun 2020- Present Google Machine Learning Bootcamp , Google Korea Sep 2021- Dec 2021 Sogang ICPC Team / Release , Sogang CS Mar 2019 – Present	

CERTIFICATES	Certificate in Tensorflow Developers , Tensorflow Certificate Program Oct 2021 – Oct 2024 Advanced Data Analytics Semi-Professional , Korea Data Agency Apr 2021 ITQ (MS Office) & GTQ (Photoshop) Oct 2011
MEDIA	'Nunettine' wins Grand Prize at Gangseo-gu Big Data Contest , Sogang People May 2023 'DAVENGERS' wins BIGCONTEST Data Analytics Innovation League , Sogang People Dec 2022 UNIST venture 'OCONNECT' wins James Dyson Awards 2022 , UNIST Press Sep 2022
SPEECH	<ul style="list-style-type: none"> ▪ [PDF] Seminar Samsung DACON Challenge - Domain Adaptation @ Release(Sogang CS) Dec 2023 ▪ [PDF] Seminar Dive into YOLOv8 @ Nota Inc. Mar 2023 ▪ [PDF] Undergraduate Speech at Carbon Neutral Workshop @ Shinhan Card & World Bank 2023
LANGUAGES	<ul style="list-style-type: none"> ▪ Korean: Native / English: Fluent ▪ Hanja : Lv-3 (Korea Association for the Promotion of Hanja Edu.)
PROJECTS	<p>Samsung AI Challenge - Camera Invariant Domain Adaptation Sep 2023 –Oct 2023</p> <ul style="list-style-type: none"> ▪ [PPT] Domain Adaptation for Fisheyed Images with SePiCo ▪ [My Job] Applying Fisheye Augmentation, Transformer based Segmentation model, Model Research ▪ [Tech Stack] Python, Pandas, NumPy, PyTorch Hyunjae Kim, <p>Game Review Dashboard Implementation with NLP Sentimental Analysis May 2023 –Jun 2023</p> <ul style="list-style-type: none"> ▪ [PPT] Game Review Analysis Dashborad applying NLP Methods : BiLSTM, KoBERT (Fine-tuned) ▪ [My Job] Developing Game Review NLP Dashboard Main Page Configuration ▪ [Tech Stack] Python, Pandas, NumPy, PyTorch, TensorFlow, Docker, FastAPI, KoNLPy, Plotly ▪ [Team NT Fragile] Hyunjae Kim, ChanJoong Lee, Beomyun Kwon, Chanho Park, Minhye Lee <p>Risk Rating Model for Small Business Owners using the Credit Rating Model Mar 2023 –May 2023</p> <ul style="list-style-type: none"> ▪ [Award] [PPT] Mayor of Gangseo-gu Office Award ▪ Integrated data in Gangseo-gu, focusing on data from the Seoul Credit Guarantee Foundation Risk Rating model for small business owners in Gangseo-gu using the credit rating model ▪ [Link] Creating a Risk Index Dashboard with Tableau ▪ [My Job] Data Analysis & Processing, Designing Presentation ▪ [Tech Stack] Python, Pandas, NumPy, Tableau ▪ [Team NUNETTINE] Heejin Park, Mijung Bang, Moonil Yang <p>Eco-friendly travel route RecSys in Jeju Island Sep 2022 – Oct 2022</p> <ul style="list-style-type: none"> ▪ [Link] [Award] [PPT] Nat'l Information Society Agency (NIA) President Award ▪ [My Job] Prototype Design with Streamlit & Design an Official Project Webpage, CI/CD with GitHub <ul style="list-style-type: none"> • Assist on applying NLP methods and designing an user-specific ML algorithm ▪ [1] Carbon Footprint Calculator Construct Carbon Footprint Calculator by Travel Area <ul style="list-style-type: none"> • Defined Categories : Traffic, Food, Accommodation and Tourism • Crawling raw data from 'VISIT JEJU' & 'NAVER Map' • Processing & Cleansing & EDA and Design Calculator Logic for those 4 categories ▪ [2] Eco-Friendly & User-Specific JEJU Travel Route Recommender System <ul style="list-style-type: none"> • [Traveler Feature Hexagon] Deployed with Streamlit • [Link] Score Calculation by Tourist Spot with NLP, Word2Vec, t-SNE, Clustering • [Link] Rule-Based Machine Learning Algorithm ▪ [Team DAVENGERS] Jeonghyun Ha, Kyunghoon Na, Kyungjoo Ko, Hannah Jung

OCONNECT

http://oconnect.kr



ONE STEP, an easy to plug in outlet

REP.	CEO Hyeong-Jun Bang
MEMBERS	CTO Jinseo Park CDO Kyuhwan Shim
LOCATION	UNISPARK, UNIST Bldg. 307 1F, 50, UNIST-gil, Eonyang-eup, Ulju-gun, Ulsan, Republic of Korea
AWARDS	<ul style="list-style-type: none">▪ JAMES DYSON AWARD 2022 - Nat'l, Korea, James Dyson Foundation ▫ Winner (TOP 3), International Competition Jul 2022▪ PIN UP Concept Design Award 2021, KAID ▫ BEST 100 in Living Goods Design Dec 2021▪ Busan-Ulsan-KyungPook Startup Day Innovation Ventures League Samsung Electronics KyungPook, Ulsan, Busan Creative Econ. & Innov. Center ▫ Excellence Prize at Futures' League Dec 2021▪ Challenge K-Startup Expo : Collegiate Competition Ministry of SMEs and Startups, Korean Institute of Startup & Entrepreneurship Development ▫ Top 10, Offline Exhibition Oct 2021 ▫ Top 50, Offline Exhibition Aug 2019▪ Social Challenge alpha 7, OhMyCompany, BSS, LISCC ▫ Challenge Award, Crowd Funding (Funded 1,424,000 KRW) Sep 2020 – Dec 2020▪ Ulsan Collegiate Startup Excellent Idea Contest Ulsan Creative Econ. & Innov. Center ▫ Winner : Grand Prize Nov 2020▪ Institute of Science & Technology Startups Competition KAIST, GIST, DGIST, UNIST, POSTECH ▫ Representative of UNIST (Top 2 at UNIST) Dec 2020 ▫ Representative of UNIST (Top 3 at UNIST) Nov 2019
FUNDINGS & SUPPORT PROGRAM	<ul style="list-style-type: none">▪ DIDIMDOL First Step - Startup Growth Development Project, Ministry of SMEs and Startups, ▫ Recommended from Ulsan Creative Econ. & Innov. Center Aug 2022 – Jul 2023▪ Ulju Youth Startup Academy, Ulsan Youth Startup Center Mar 2022 – Dec 2022▪ Pre-IBK Changgong @ UNIST, UNIST, IBK Changgong Jul 2022 – Nov 2022▪ Private-Sector Open Start-up Revitalization Project, Ulsan Creative Econ. & Innov. Center May 2022 – Oct 2022▪ BUSAN BIGS Program, Busan-si, KSD, KHUG, KOSPO, HF, KIBO, Busan PA, BNK Mar 2022 – Sep 2022▪ Innopolis Campus for Ulsan Collegiate, UNIST, Innopolis Jun 2021 – Aug 2022▪ 12th UEPA Startup Incubator, Ulsan Youth Startup Center Mar 2021 – Dec 2021▪ SBC Youth Entrepreneurship Academy, Korea SMEs and Startups Agency ▫ Most Funded Startup Company (100,000,000 KRW) ▫ Excellent Completion at Pre-School

- 'Pre-School' Completion of Excellence & Youth Startup Academy Nov 2020 – Nov 2021
 - **UNIST UNICORN Start-Up Support Program**, UNIST
 - Funding (12,000,000 KRW)
 - Participated for Four Semesters Sep 2019 – Feb 2021
 - **KISED Pre-Startup Package (General Field)**,
Korea Institute of Startup & Entrepreneurship Development
 - Most Funded (70,000,000 Won) Apr 2020– Dec 2020
- ACTIVITIES**
- **Ulsan Knowledge-Technology Startup Center**, Ulsan Technopark Oct 2020
 - **Patent IP Training Education**, Intellectual Property Office Jun 2020 – Dec 2020
 - **K-Camp Busan**, Krypton Nov 2019 – May 2020
- MEDIAS**
- **UNIST Startup OCONNECT wins at JAMES DYSON AWARD 2022**,
UNIST Press, CHOSUN Ilbo, Segye Ilbo, Sisa-news, Newsis Feb 2022
 - **UNIST 2021 Innopolis Performance Presentation**,
UNIST Press, UlsanDaily, ETNews Feb 2022
 - **UNIST UNISPARK for Young Entrepreneurs** UNIST Magazine 2021 Winter Dec 2021
 - **Southeast Venture Competition held by UNIST Lab Startup Innovation Group**
The Korea Economy TV Dec 2021
 - **"New evolution of electrical outlets..." OneStep is released**
The Korea Economic Daily Dec 2021
 - **"Make a 'National Outlet' which 'Connects' warmth to each other"**
UNIST Magazine 2021 Spring Feb 2021
 - **"Doing businesses regardless of COVID-19" - Leap forward with technology**
SBS, UBC Feb 2021
- PATENTS**
- **Patent Registration**
 - **Patent Application**
 - **Design Registration Application**, H. J. Bang(2021)
 - **International PCT Application**
 - **Trademark Application**