Kyuhwan Shim

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INTERESTS	Vision-Language Model		
EDUCATION	 Sogang University, Seoul, Korea ■ B.S. in Computer Science (RecSys A+, ML A0) Chungnam Science High School, Kongju, Chungnam, Korea ■ H.S.D. in Informatics 	Mar 2019 – Aug 2024 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 Mentee, Lee Lab, Data Science@Seoul Nat'l U. & Google Korea	Dec 2023 – Aug 2024 Dec 2023 – Feb 2024	
MILITARY DUTY	Yeongdong Firestation, Yeongdong, Chungbuk, Korea	Aug 2020 – Apr 2022	
AWARDS	 2nd Place, Data Science@Seoul Nat'l U Chest X-Ray Analysis with TorchXRay 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 Frize (Nat'l Information Society Agency President Award), NIA, Mini. BIGCONTEST Data Analytics Innovation League 2022 Grand Prize (Runner-Ueiprt] [PRJ] Carbon Footprint Calculator & Eco-friendly JEJU travel route Reexcellence Award, Chung-nam Science Fair (64th) [Poster] Solar Power System considering the impact of Wave Height Special Prize, Chung-nam Science Fair (63th) [Poster] Laser Cutting Machine Using Mechanum Wheels 	ster of Sci. & Tech. Jp)	
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] Myunghak Scholarship, Kongju Myunghak Scholarship Samsung Dream Scholarship, Samsung Dream Scholarship Foundation 	2019 2017 2016	
ACTIVITIES	[Samsung AI Challenge / SAIT]Camera-Invariant Domain Adaptation Challenge ■ [DACON] Domain Adaptive Semantic Segmentation Alg. Robust to Camera Comparition [Link] Top 30 with SePiCo & Joined Talent pool of Samsung Electronics [LG Aimers / LG AI Research]: Online AI Education & Hackathon ■ [DACON] Smart Factory Product Quality Status Classification AI Online Hackathon Finalist, Phase 2 Top 30 (3% for 891) INSIGHT, Data Science Group @ Sogang Business School Co-Founder, Chief Design Officer, Programmer, OCONNECT	Characteristic Changes Sep 2023- Sep 2023	

Sep 2021- Dec 2021

Google Machine Learning Bootcamp, Google Korea

	Sogang ICPC Team / Release, Sogang CS	Mar 2019 – Present
CERTIFICATES	Certificate in Tensorflow Developers, Tensorflow Certificate Program Advanced Data Analytics Semi-Professional, Korea Data Agency ITQ (MS Office) & GTQ (Photoshop)	Oct 2021 – Oct 2024 Apr 2021 Oct 2011
MEDIA	'Nunettine' wins Grand Prize at Gangseo-gu Big Data Contest, Sogang People 'DAVENGERS' wins BIGCONTEST Data Analytics Innovation League, Sogan UNIST venture 'OCONNECT' wins James Dyson Awards 2022, UNIST Press	May 2023 g People Dec 2022 Sep 2022
SPEECH	 [PDF] Seminar Samsung DACON Challenge - Domain Adaptation @ Release(S [PDF] Seminar Dive into YOLOv8 @ Nota Inc. [PDF] Undergraduate Speech at Carbon Neutral Workshop @ Shinhan Card & 	Mar 2023
LANGUAGES	 Korean: Native / English: Fluent Hanja: Lv-3 (Korea Association for the Promotion of Hanja Edu.) 	

Game Review Dashboard Implementation with NLP Sentimental Analysis May 2023 - Jun 2023

• [PPT] Game Review Analysis Dashborad applying NLP Methods : BiLSTM, KoBERT (Fine-tuned)

• [My Job] Applying Fisheye Augmentation, Transformer based Segmentation model, Model Research

- [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

Risk Rating Model for Small Business Owners using the Credit Rating Model Mar 2023 –May 2023

■ [Award] [PPT] Mayor of Gangseo-gu Office Award

PROJECTS

- 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

Samsung AI Challenge - Camera Invariant Domain Adaptation • [PPT] Domain Adaptation for Fisheyed Images with SePiCo

• [Tech Stack] Python, Pandas, NumPy, PyTorch Hyunjae Kim,

- [Tech Stack] Python, Pandas, NumPy, Tableau
- [Team NUNETTINE] Heejin Park, Mijung Bang, Moonil Yang

Eco-friendly travel route RecSys in Jeju Island

Sep 2022 – Oct 2022

Sep 2023 -Oct 2023

- [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 · Assist on applying NLP methods and designing an user-specific ML algorithm
- [1] Carbon Footprint Calculator Construct Carbon Footprint Calculator by Travel Area
 - 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
 - [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	 JAMES DYSON AWARD 2022 - Nat'l, Korea, James Dyson Formal Winner (TOP 3), International Competetion PIN UP Concept Design Award 2021, KAID 	undation Jul 2022	
	 BEST 100 in Living Goods Design Busan-Ulsan-KyungPook Startup Day Innovation Ventures Samsung Electronics 	Dec 2021 League	
	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 Developemen 	t	
	 Top 10, Offline Exhibition Top 50, Offline Exhibition Social Challenge alpha 7, OhMyCompany, BSS, LISCC 	Oct 2021 Aug 2019	
	 Challenge Award, Crowd Funding (Funded 1,424,000 KRW) Ulsan Collegiate Startup Excellent Idea Contest 	Sep 2020 – Dec 2020	
	Ulsan Creative Econ. & Innov. Center Winner: Grand Prize Institute of Science & Technology Startups Competition	Nov 2020	
	KAIST, GIST, DGIST, UNIST, POSTECH Representative of UNIST (Top 2 at UNIST) Representative of UNIST (Top 3 at UNIST)	Dec 2020 Nov 2019	
FUNDINGS & SUPPORT	 DIDIMDOL First Step - Startup Growth Development Project Ministry of SMEs and Startups, 	st Step - Startup Growth Development Project,	
PROGRAM	Recommended from Ulsan Creative Econ. & Innov. Center	Aug 2022 – Jul 2023	
	 Ulju Youth Startup Academy, Ulsan Youth Startup Center Pre-IBK Changgong @ UNIST, UNIST, IBK Changgong Private-Sector Open Start-up Revitalization Project, 	Mar 2022 – Dec 2022 Jul 2022 – Nov 2022	
	Ulsan Creative Econ. & Innov. Center • BUSAN BIGS Program,	May 2022 – Oct 2022	
	Busan-si, KSD, KHUG, KOSPO, HF, KIBO, Busan PA, BNK Innopolis Campus for Ulsan Collegiate, UNIST, Innopolis	Mar 2022 – Sep 2022 Jun 2021 – Aug 2022	
	 12th UEPA Startup Incubator, Ulsan Youth Startup Center SBC Youth Entrepreneurship Academy, Korea SMEs and Sta 	Mar 2021 – Dec 2021	
	Most Funded Startup Company (100,000,000 KRW) Fycollent Completion at Dro School		

Excellent Completion at Pre-School

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