

Kyuhwan Shim

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INTERESTS	Computer Vision (Object Detection & Segmentation), Application of LLM	
WORK EXPERIENCE	Machine Learning Engineer Intern, Nota Inc. Seoul, Korea	Mar 2023 – Aug 2023
	<ul style="list-style-type: none">▪ [Computer Vision] Develop Vision-based AI models for Intelligent Traffic System<ul style="list-style-type: none">• Application & Experiment SOTA Computer Vision Model (YOLO Detection)▪ [EdgeAI] Inference Traffic Data Extractor Model on NVIDIA AGX Orin (at Deepstream 6.1.)▪ [MLOps] Supplement ML Pipeline (kubeflow, Docker and GCP)▪ [Data/DevOps] Construct Data lake for processing public data (AWS, GitHub Action)	
	Senior Designer, OCONNECT Ulsan, Korea	Jun 2020 – Feb 2023
	<ul style="list-style-type: none">▪ Student Startup which makes Easy-Insert Socket, OneStep (CEO Hyeong-Jun Bang)▪ [R&D PRJ] at Didimdol R&D start-up growth technology '22▪ [Achievement] Winner @ James Dyson Award '22 KR, Ulsan Collegiate Startup Competition	
EDUCATION	Sogang University , Seoul, Korea	
	▪ B.S. in Computer Science	Mar 2019 – Presents
	Chungnam Science High School , Kongju, Chungnam, Korea	
	▪ H.S.D. in Informatics	Mar 2016 – Feb 2019
MILITARY DUTY	Yeongdong Firestation , Yeongdong, Chungbuk, Korea	
	▪ Korea Conscripted Firefighters Agency, Yeongdong Rescue & Firehouse	Aug 2020 – Apr 2022
AWARDS	Grand Prize (1st Place) , Gangseo-gu Office	
	▪ [PPT] Risk Rating Model for Small Business Owners in Gangseo-gu using the Credit Rating Model <ul style="list-style-type: none">• Mayor of Gangseo-gu Office Award	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) : [Link] Scholarship from Smilegate	
	Albatross Scholarship , Sogang University	
	▪ 1-year full scholarship for talent 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	
	<ul style="list-style-type: none">▪ [DACON Link] [Google Drive] Development of a Domain Adaptive Semantic Segmentation Algorithm Robust to Camera Characteristic Changes▪ Public / Private Leaderboard Top 30 with 'SePiCo' [GitHub] [Paper]▪ [Link] Invited to join Samsung Electronics' talent pool	
	[LG Aimers / LG AI Research]: Online AI Education & Hackathon	
	<ul style="list-style-type: none">▪ [DACON Link] Smart Factory Product Quality Status Classification AI Online Hackathon▪ Phase 3 Online Hackathon Finalist, Phase 2 Top 29 (3%, 29/891)	
	INSIGHT: Data Science, Business School of Sogang U.	
	<ul style="list-style-type: none">▪ Data Analysis & ML/DL Leading TA, Various Projects (RecSys, NLP, etc.)	
	Round 1 , Google Code Jam	Jul 2021

	Co-Founder, Chief Design Officer, Programmer, OCONNECT <ul style="list-style-type: none"> Assist developing ONESTEP, an easy-insert socket Design IR Document & Assist on Operation to developing an Moissanite Product 	Jun 2020- Present
	Google Machine Learning Bootcamp , Google Korea <ul style="list-style-type: none"> Coursera DL Specialization, Certificate in Tensorflow Developers Kaggle Competition, Online Webinar & Tech Talks 	Sep 2021- Dec 2021
	Sogang ICPC Team , Sogang University CSE <ul style="list-style-type: none"> Algorithm Problem Solving Group 	Mar 2019 – Present
CERTIFICATES	Certificate in Tensorflow Developers , Tensorflow Certificate Program Advanced Data Analytics Semi-Professional , Korea Data Agency ITQ OA Master for Microsoft Powerpoint, Excel, Hancm Hangul GTQ Lv-2 for Adobe Photoshop	Oct 2021 – Oct 2024 Apr 2021 Oct 2011 Oct 2011
MEDIA	'Nunettine' wins Grand Prize at Gangseo-gu Big Data Contest , Sogang People 'DAVENGERS' wins '22 BIGCONTEST Data Analytics Innovation League , Sogang People UNIST venture 'OCONNECT' wins James Dyson Awards 2022 , UNIST Press	May 2023 Dec 2022 Sep 2022
SPEECH	<ul style="list-style-type: none"> [PDF] Seminar YOLOv8 Seminar at Nota [PDF] Speech at Carbon Neutral Workshop - held by Shinhan Card & World Bank 	20230329 2023
LANGUAGES	<ul style="list-style-type: none"> Korean: Native English: Fluent Hanja : Lv-3 (Korea Association for the Promotion of Hanja Edu.) 	
SKILLS	<ul style="list-style-type: none"> ML Framework: PyTorch, TensorFlow Programming : C/C++, Python (Intermediate), Verilog, MATLAB, Assembly Language, \LaTeX (Novice) MLOps & DataOps : AWS, GCP, Edge Devices (NVIDIA AGX Orin), Docker, Kubeflow 	
PROJECTS	Game Review Dashboard Implementation with NLP Sentimental Analysis <ul style="list-style-type: none"> [Award] Grand Prize from InsightCON, 2023 Spring INSIGHT Projects Competition [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 Risk Rating Model for Small Business Owners using the Credit Rating Model <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 Development of Carbon Footprint calculator & Eco-friendly travel route recommendation system in Jeju Island <ul style="list-style-type: none"> [Official Project Link] Innovation League Grand Prize (Runner-Up) @ BIGCONTEST '22 <ul style="list-style-type: none"> [Award] [PPT] Nat'l Information Society Agency (NIA) President Award [My Job] Develop with Streamlit & Deploy with Streaming Sharing, 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 	May 2023 –Jun 2023 Mar 2023 –May 2023 Sep 2022 – Oct 2022

- **[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
- **Skill Stack**
 - Main Language : Python
 - Library : Pandas, Streamlit, Matplotlib, Plotly, Seaborn, NumPy, GeoPy
 - Develop Environment : Jupyter Notebook, Google Colaboratory (Windows 10, Mac OS X)
 - Deployment : Streamlit Sharing
 - CI/CD & Cooperation with GitHub

Shell Project, System Programming, Sogang University Apr 2022 – Apr 2022

- **[GitHub Link]** Design my own Shell which translates user's command to the Kernel
- [1] Built my own linux shell with C Language, which executes with Linux Basic Command such as 'cd', 'mkdir', 'rmdir', et al.
- [2] Create child process with 'fork()' function, and parent process create a new child process for each instruction by parsing from a Pipelined command.

Stock Server Project, System Programming, Sogang University May 2022 – May 2022

- **[GitHub Link]** Construct a concurrent stock server which can be connected by multiple clients that ask to buy or sell stocks concurrently
- [1] Two Approaches to serve stock server : Event-based, and Thread-based
- [2] Show the status of current stock written from stock.txt file
- After command exit() from the server, update stock.txt file with the rewritten stock status