

# Kyu-Hwan Shim

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INTERESTS	Deep Learning, Application of Language Model	
WORK EXPERIENCE	<b>Machine Learning Engineer Intern, Nota AI</b> Seoul, Korea ▪ Intelligent Traffic System AI Model Development Team ▪ Develop Vision-based AI models - based on Object Segmentation and its applications <b>Senior Designer, OCONNECT</b> Ulsan, Korea ▪ Student Startup which makes Easy-Insert Socket, OneStep (CEO Hyeong-Jun Bang) ▪ <b>[R&amp;D PRJ]</b> at Didimdol R&D start-up growth technology '22 ▪ <b>[Achievement]</b> Winner @ James Dyson Award '22 KR, Ulsan Collegiate Startup Competition	Mar 2023 – Present Jun 2020 – Feb 2023
EDUCATION	<b>Sogang University</b> , Seoul, Korea ▪ B.S. in Computer Science <b>Chungnam Science High School</b> , Kongju, Chungnam, Korea ▪ H.S.D. in Informatics	Mar 2019 – Presents Mar 2016 – Feb 2019
MILITARY DUTY	<b>Yeongdong Firestation</b> , Yeongdong, Chungbuk, Korea ▪ Korea Conscripted Firefighters Agency, Yeongdong Rescue & Firehouse	Aug 2020 – Apr 2022
AWARDS & SCHOLARSHIPS	<b>Grand Prize (Runner-up)</b> , NIA, Minister of Science & Technology ▪ '22 BIGCONTEST Data Analytics Innovation League 2022 Grand Prize (Runner-Up) ▪ Nat'l Information Society Agency (NIA) President Award ▪ <b>[PPT] [PRJ]</b> Carbon Footprint Calculator & Eco-friendly JEJU travel route RecSys. <b>Sogang Alumni Scholarship</b> , Sogang University Alumni ▪ 1-semester full scholarship - General (2020), Startup (2022) <b>Albatross Scholarship</b> , Sogang University ▪ 1-year full scholarship for talent in SW Fields <b>Excellence Award</b> , Chung-nam Science Fair (64th) ▪ <b>[Poster]</b> Solar Power System considering the impact of Wave Height <b>Special Prize</b> , Chung-nam Science Fair (63th) ▪ <b>[Poster]</b> Laser Cutting Machine Using Mechanum Wheels <b>Myunghak Scholarship</b> , Kongju Myunghak Scholarship <b>Samsung Dream Scholarship</b> , Samsung Dream Scholarship Foundation	2022 2020, 2022 2019 2018 2017 2017 2016
CERTIFICATES	<b>Certificate in Tensorflow Developers</b> , Tensorflow Certificate Program <b>Advanced Data Analytics Semi-Professional</b> , Korea Data Agency <b>ITQ OA Master</b> for Microsoft Powerpoint, Excel, Hancm Hangul <b>GTQ Lv-2</b> for Adobe Photoshop	Oct 2021 – Oct 2024 Apr 2021 Oct 2011 Oct 2011
ACTIVITIES	<b>LG Aimers</b> : Online AI Education & Hackathon, LG AI <b>INSIGHT</b> : Data Analyst, Business School of Sogang U. <b>Round 1</b> , Google Code Jam <b>Co-Founder, Chief Design Officer, Programmer</b> , OCONNECT ▪ Main Designer & Operating Officer ▪ Assist developing ONESTEP, an easy-insert socket <b>Google Machine Learning Bootcamp</b> , Google Korea ▪ Coursera Deep Learning Specialization, Certificate in Tensorflow Developers ▪ Kaggle Data Analysis Competition, Online Webinar & Meetings <b>Sogang ICPC Team</b> , Sogang University CSE ▪ Algorithm Problem Solving Group	Jan 2023- Present Sep 2022- Jun 2023 Jul 2021 Feb 2021- Present Sep 2021- Dec 2021 Mar 2019 – Present

<b>LANGUAGES</b>	<ul style="list-style-type: none"> <li>▪ Korean: Native / English: Fluent</li> <li>▪ Hanja : Lv-3 (Korea Association for the Promotion of Hanja Edu.)</li> </ul>	
<b>SKILLS</b>	<ul style="list-style-type: none"> <li>▪ ML Framework: PyTorch, TensorFlow /</li> <li>▪ Programming Language: C/C++, Python (Intermediate) <ul style="list-style-type: none"> <li>• Verilog, MATLAB, Assembly Language, L<sup>A</sup>T<sub>E</sub>X (Novice)</li> </ul> </li> </ul>	
<b>PROJECTS</b>	<p><b>Development of Carbon Footprint calculator &amp; Eco-friendly travel route recommendation system in Jeju Island</b> Sep 2022 – Oct 2022</p> <ul style="list-style-type: none"> <li>▪ <b>[Official Project Link]</b> Innovation League Grand Prize (Runner-Up) @ BIGCONTEST '22 <ul style="list-style-type: none"> <li>• <b>[Award] [PPT]</b> Nat'l Information Society Agency (NIA) President Award</li> </ul> </li> <li>▪ <b>[My Job]</b> Develop with Streamlit &amp; Deploy with Streaming Sharing, Design an Official Project Webpage, CI/CD with GitHub <ul style="list-style-type: none"> <li>• Assist on applying NLP methods and designing an user-specific ML algorithm</li> </ul> </li> <li>▪ <b>[1] Carbon Footprint Calculator</b> Construct Carbon Footprint Calculator by Travel Area <ul style="list-style-type: none"> <li>• Defined Categories : Traffic, Food, Accommodation and Tourism</li> <li>• Crawling raw data from 'VISIT JEJU' &amp; 'NAVER Map'</li> <li>• Processing &amp; Cleansing &amp; EDA and Design Calculator Logic for those 4 categories</li> </ul> </li> <li>▪ <b>[2] Eco-Friendly &amp; User-Specific JEJU Travel Route Recommender System</b> <ul style="list-style-type: none"> <li>• <b>[Traveler Feature Hexagon]</b> Deployed with Streamlit</li> <li>• <b>[Link]</b> Score Calculation by Tourist Spot with NLP, Word2Vec, t-SNE, Clustering</li> <li>• <b>[Link]</b> Rule-Based Machine Learning Algorithm</li> </ul> </li> <li>▪ <b>[Team DAVENGERS]</b> Jeonghyun Ha, Kyunghoon Na, Kyungjoo Ko, Hyenah Jung</li> <li>▪ <b>Skill Stack</b> <ul style="list-style-type: none"> <li>• Main Language : Python</li> <li>• Library : Pandas, Streamlit, Matplotlib, Plotly, Seaborn, NumPy, GeoPy</li> <li>• Develop Environment : Jupyter Notebook, Google Colaboratory (Windows 10, Mac OS X)</li> <li>• Deployment : Streamlit Sharing</li> <li>• CI/CD &amp; Cooperation with GitHub</li> </ul> </li> </ul> <p><b>Shell Project, System Programming, Sogang University</b> Apr 2022 – Apr 2022</p> <ul style="list-style-type: none"> <li>▪ <b>[GitHub Link]</b> Design my own Shell which translates user's command to the Kernel</li> <li>▪ [1] Built my own linux shell with C Language, which executes with Linux Basic Command such as 'cd', 'mkdir', 'rmdir', et al.</li> <li>▪ [2] Create child process with 'fork()' function, and parent process create a new child process for each instruction by parsing from a Pipelined command.</li> </ul> <p><b>Stock Server Project, System Programming, Sogang University</b> May 2022 – May 2022</p> <ul style="list-style-type: none"> <li>▪ <b>[GitHub Link]</b> Construct a concurrent stock server which can be connected by multiple clients that ask to buy or sell stocks concurrently</li> <li>▪ [1] Two Approaches to serve stock server : Event-based, and Thread-based</li> <li>▪ [2] Show the status of current stock written from stock.txt file <ul style="list-style-type: none"> <li>• Command in stock.txt : '[Stock ID] [Stock Count] [Stock Price]'</li> <li>• Command Used for Sale : '[Buy/Sell] [Stock ID] [Stock Count]'</li> </ul> </li> <li>▪ After command exit() from the server, update stock.txt file with the rewritten stock status</li> </ul>	
<b>MEDIA</b>	<p><b>DAVENGERS wins '22 BIGCONTEST Data Analytics Innovation League</b>, Sogang People Dec 2022</p> <p><b>UNIST venture 'OCONNECT' wins James Dyson Awards 2022</b>, UNIST Press Sep 2022</p>	

# OCONNECT

<http://oconnect.kr>



ONE STEP, an easy to plug in outlet

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

	<ul style="list-style-type: none"> <li>▫ Excellent Completion at Pre-School</li> <li>▫ 'Pre-School' Completion of Excellence &amp; Youth Startup Academy</li> </ul>	Nov 2020 – Nov 2021
	<ul style="list-style-type: none"> <li>▪ <b>UNIST Unicorn Start-Up Support Program</b>, UNIST <ul style="list-style-type: none"> <li>▫ Funding (12,000,000 KRW)</li> <li>▫ Participated for Four Semesters</li> </ul> </li> </ul>	Sep 2019 – Feb 2021
	<ul style="list-style-type: none"> <li>▪ <b>KISED Pre-Startup Package (General Field)</b>, Korea Institute of Startup &amp; Entrepreneurship Development <ul style="list-style-type: none"> <li>▫ Most Funded (70,000,000 Won)</li> </ul> </li> </ul>	Apr 2020– Dec 2020
<b>ACTIVITIES</b>	<ul style="list-style-type: none"> <li>▪ <b>Ulsan Knowledge-Technology Startup Center</b>, Ulsan Technopark</li> <li>▪ <b>Patent IP Training Education</b>, Intellectual Property Office</li> <li>▪ <b>K-Camp Busan</b>, Krypton</li> </ul>	Oct 2020 Jun 2020 – Dec 2020 Nov 2019 – May 2020
<b>MEDIAS</b>	<ul style="list-style-type: none"> <li>▪ <b>UNIST Startup OCONNECT wins at JAMES DYSON AWARD 2022</b>, UNIST Press, CHOSUN Ilbo, Segye Ilbo, Sisa-news, Newsis</li> <li>▪ <b>UNIST 2021 Innopolis Performance Presentation</b>, UNIST Press, UlsanDaily, ETNews</li> <li>▪ <b>UNIST UNISPARK for Young Entrepreneurs</b> UNIST Magazine 2021 Winter</li> <li>▪ <b>Southeast Venture Competition held by UNIST Lab Startup Innovation Group</b> The Korea Economy TV</li> <li>▪ <b>"New evolution of electrical outlets..." OneStep is released</b> The Korea Economic Daily</li> <li>▪ <b>"Make a 'National Outlet' which 'Connects' warmth to each other"</b> UNIST Magazine 2021 Spring</li> <li>▪ <b>"Doing businesses regardless of COVID-19" - Leap forward with technology</b> SBS, UBC</li> </ul>	Feb 2022 Feb 2022 Dec 2021 Dec 2021 Dec 2021 Feb 2021 Feb 2021
<b>PATENTS</b>	<p>OCONECT holds total 18 patents.</p> <ul style="list-style-type: none"> <li>▪ <b>Patent Registration</b>, total 1</li> <li>▪ <b>Patent Application</b> total 5</li> <li>▪ <b>Utility Patent</b> total 2</li> <li>▪ <b>Design Registration Application</b> total 3</li> <li>▪ <b>International PCT Application</b>, total 1</li> <li>▪ <b>Trademark Application</b>, total 6</li> </ul>	