

JiHyuk Byun

Contact Information	✉ Email: quswlgur123@yonsei.ac.kr 🐙 Github: github.com/JiHyuk-Byun 🏠 Homepage: jihyuk-byun.github.io ☎ Phone: 010-5091-0199 in LinkedIn: linkedin.com/in/jihyuk-byun	
Research Interests	Computer Vision / Deep Learning Agentic AI, 3D Vision, Vision Language Model (VLM), Multimodal Learning	
Education	Yonsei University, Seoul, Korea M.S. in Artificial Intelligence Mar. 2024 – Aug. 2026 (exp.) Advisor: Prof. Seon Joo Kim GPA: 4.12/4.3 B.S. in Electrical and Electronic Engineering Mar. 2018 – Aug. 2024 GPA: 3.92/4.3 (Major: 4.03/4.3) Republic of Korean Air Force, Honorable Discharge (2019.10 – 2021.08)	
Research Experience	Graduate Researcher Sep. 2024 – Present Advisor: Prof. Seon Joo Kim (CIPLAB, Yonsei University) - Web Agent Evaluation & Benchmark (COLM'26, with Microsoft Research) 3D Preference-Aligned Quality Assessment (IPIU'26) Undergraduate Researcher Jul. 2023 – Aug. 2024 Advisor: Prof. Seon Joo Kim (CIPLAB, Yonsei University) - Continual Learning for Video Action Recognition (CVPR'24 submitted) - Object Centric Learning	
Publications	Where Did It Go Wrong? Process-Level Evaluation of Web Agents with Semantic State Tracking <i>Conference on Language Modeling (COLM)</i> , 2026 (Accept) Jiwan Chung, JiHyuk Byun , Vibhav Vineet, Seon Joo Kim Towards Preference-Aligned 3D Quality Assessment <i>Workshops on Image Processing and Image Understanding (IPIU)</i> , 2026 (Accept) JiHyuk Byun , Seon Joo Kim Continual Learning for Video Action Recognition <i>IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)</i> , 2024 (Submitted) MinJu Ki, JiHyuk Byun , Seon Joo Kim A Comprehensive Study Integrating Instrument Separation and Transformer <i>Workshops on Image Processing and Image Understanding (IPIU)</i> , 2024 JiHyuk Byun* , Yunsu Park*, Seon Joo Kim (* indicates equal contribution)	

Projects	Enhancing Text-to-3D Generation with PBR Materials Jul. – Dec. 2024 <i>Funded by Korea Deep Learning</i> - Reproduced baseline 3D generative models (DreamFusion, NeRF, 3DGS) - Preprocessed 11TB-scale Objaverse 3D dataset (mesh, multi-view rendering, PBR maps)
	Developing a Sustainable Collaborative Multi-modal Continual Learning Framework Jul. – Dec. 2023 <i>Funded by IITP (Institute for Information & Communication Technology Planning & Evaluation)</i> - Built video data pipeline (UCF101, HMDB51) and reproduced baseline continual learning models - Conducted Online Continual Learning survey with key algorithm reimplementation
	Synthetic Voice Detection May 2023 <i>Yonsei Artificial Intelligence (YAI)</i> Proposed strategies to detect AI-generated voice; 3rd place at 2nd YAI-Con
Awards and Honors	Gwanjeong Academic Encouragement Scholarship May 2025 – Present Total KRW 22M, top graduate students nationwide
	Sunhyun Scholarship Mar. 2025 Sunhyun Scholarship Foundation
	Highest Honors – Academic Excellence Award Feb. 2022 (Top 1%) Recognized for outstanding academic performance (highest GPA)
	High Honors – Academic Excellence Award Sep. 2022, Feb. 2024 (Top 3%) $\times$ 2 Yonsei University
	Jinri (Academic Excellence) Scholarship Sep. 2022 Yonsei University
	Sundeuk Scholarship Jan. 2023 Sundeuk Scholarship Foundation
Teaching Experience	AIC2120: Introduction to AI and Its Application Fall 2024, Fall 2025 Teaching Assistant, Yonsei University
Skills	Programming Languages Python, C/C++, Java, Verilog
	Tools - Deep Learning Frameworks, Python Scientific Computing Libraries - LLM Libraries (vLLM, Hugging Face Transformers, Accelerate, OpenAI/Anthropic API) - Browser Automation (Playwright, Selenium) 3D Vision Scientific Tools (Open3D, Trimesh, PyTorch3D, Blender) - Docker, Linux, Shell Scripts, SLURM, WandB, $\LaTeX$ - Hardware Designing Tools (Pspice, Hspice, Design Vision)
	Languages Korean (native), English (fluent)
References	Yonsei University Prof. Seon Joo Kim, Professor, Yonsei University