

Jongha Kim

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<https://jonghakim35.github.io/>

EDUCATION	Korea University M.S. & Ph.D. Integrated Student in Computer Science and Engineering Advised by Professor Hyunwoo J. Kim at MLV Lab, Korea University	Seoul, Republic of Korea Sep 2022 - Current
	Korea University B.S. in Computer Science and Engineering B.S. in Statistics (Double Major) GPA : 4.22 / 4.5 (Major : 4.25 / 4.5)	Seoul, Republic of Korea Mar 2018 - Aug 2022
RESEARCH INTERESTS	My goal is to develop personalized and reliable multimodal AI agents. My research focuses on personalizing Multimodal Large Language Models, exploring post-training methods (<i>e.g.</i> , DPO), systems (<i>e.g.</i> , RAG), and ways to leverage structured representations to complement these models to achieve the goal.	
PUBLICATIONS	<p>[1] Groupwise Query Specialization and Quality-Aware Multi-Assignment for Transformer-based Visual Relationship Detection Jongha Kim*, Jihwan Park*, Jinyoung Park*, Jinyoung Kim, Sehyung Kim, Hyunwoo J. Kim IEEE/CVF Conference on Computer Vision and Pattern Recognition (<i>CVPR</i>), 2024. [paper]</p> <p>[2] Concept Bottleneck with Visual Concept Filtering for Explainable Medical Image Classification Injae Kim*, Jongha Kim*, Joonmyung Choi, Hyunwoo J. Kim MedAGI Workshop at International Conference on Medical Image Computing and Computer-Assisted Intervention (<i>MedAGI@MICCAI</i>), 2023 (Oral Presentation). [paper]</p> <p>[3] Object Detection in Aerial Images with Uncertainty-Aware Graph Network Jongha Kim, Jinheon Baek, Sung Ju Hwang VOLI Workshop at European Conference on Computer Vision (<i>VOLI@ECCV</i>), 2022. [paper]</p> <p>[4] Relevance-aware Multi-context Contrastive Decoding for Retrieval-augmented Visual Question Answering Jongha Kim, Byungoh Ko, Jeehye Na, Jinsung Yoon, Hyunwoo J. Kim Under Review</p> <p>[5] VidChain: Chain-of-Tasks with Metric-based Direct Preference Optimization for Dense Video Captioning Ji Soo Lee*, Jongha Kim*, Jeehye Na, Jinyoung Park, Hyunwoo J. Kim Under Review</p> <p>(* denotes equal contribution)</p>	
WORK EXPERIENCES	MLAI Lab • Undergraduate Research Intern at MLAI Lab, KAIST • Advised by Professor Sung Ju Hwang, KAIST	Seoul, Republic of Korea Jan 2021 - Jul 2022
	Upstage AI • Teaching Assistant & Mentor of BoostCamp AI Tech 1-3rd course • Developed course materials, and assignments and handled questions about lectures and assignments. • Collaborated with Professor Tae Hyun Oh, POSTECH	Seongnam, Republic of Korea Dec 2020 - Jun 2022
	VoyagerX • Developer Intern	Seoul, Republic of Korea Jul 2020 - Jan 2021

	<ul style="list-style-type: none"> Developed, enhanced, and deployed deep learning models for scanning books and documents in the mobile scanner application vFlat. 	
	SW Maestro <ul style="list-style-type: none"> 10'th trainee at SW Maestro Program Developed and deployed a backend server and a deep learning model for a smartphone application DalDang, measuring the sugar content of an apple. 	Seoul, Republic of Korea May 2019 - Nov 2019
PATENTS	Information providing method and system for sharing fruit information including sugar content information measured through image vision processing. Sanghoon Lee, Hyemin Song, Jongha Kim, Hyun Kim. Korea Patent No.10-2020-0153010. Method for measuring sugar content of apple using image. Sanghoon Lee, Hyemin Song, Jongha Kim. Korea Patent No.10-2242155, registered on Apr 14, 2021	
HONORS & AWARDS	Travel Grant for CVPR 2024 CVPR 2024 Graduate School Outstanding Freshman Scholarship Korea University Dean's List Korea University Semester High Honors Korea University 2020 Agrifood Public Big Data Startup Competition Rural Development Administration National Scholarship for Science and Engineering Korea Student Aid Foundation	Jun 2024 Sep 2022 Spring 2019 Fall 2018/2019/2021, Spring 2019/2020/2021 Aug 2020 Spring 2018 - Spring 2022
ACADEMIC SERVICES	Reviewer of NeurIPS (Conference on Neural Information Processing System) Reviewer of CVPR (IEEE/CVF Conference on Computer Vision and Pattern Recognition) Reviewer of ICLR (International Conference on Learning Representations) Reviewer of AAAI (AAAI Conference on Artificial Intelligence) Reviewer of AISTATS (International Conference on Artificial Intelligence and Statistics) Program Committee of MedAGI@MICCAI (MedAGI Workshop at International Conference on Medical Image Computing and Computer-Assisted Intervention)	2024 2024,2025 2025 2025 2025 2024
TALKS	Teaching Assistant Special Topics in Artificial Intelligence (AAA740), Korea University Korea University & LG AI Workshop Korea University Defining and solving problems in deep learning projects BoostCamp AI Tech 2nd course, Upstage AI	Seoul, Republic of Korea Fall 2024 Seoul, Republic of Korea Feb 2023 Virtual Nov 2021
SKILLS	Language <ul style="list-style-type: none"> Korean (<i>native</i>) English (<i>fluent</i>), TEPS : 544/600 (<i>officially described as 'Native Level of English Proficiency'</i>) 	

Programming Skills

- Python, PyTorch, Git, Bash (Most proficient)
- TensorFlow, SQL, Node.js, React.js, Vue.js (Experienced)
- Website built: [MedAGI Workshop 2024](#), [Personal Blog](#)

Last Updated: Nov 26, 2024