# BYEONGHWI KIM

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### RESEARCH INTEREST

Embodied AI, Robotics, Autonomous Agents, Multimodality

# **EMPLOYMENT**

Research Intern, Allen Institute for AI (AI2), Seattle, WA

Sept. 2021 - Mar. 2022

Mentor: Dr. Roozbeh Mottaghi

#### **EDUCATION**

Seoul National University

(Expected) from Sept. 2024

Ph.D. Student in Electrical and Computer Engineering (Advisor: Jonghyun Choi)

Yonsei University

Sept. 2022 - (expected) Aug. 2024

Doctoral Course Completed in Artificial Intelligence ( $Advisor: Jonghyun\ Choi$ )

CGPA: 3.97/4.3

Gwangju Institute of Science and Technology (GIST)

Mar. 2020 - Aug. 2022

M.S. in Artificial Intelligence (Advisor: Jonghyun Choi)

CGPA: 4.12/4.5

GIST President Fellowship

Kwangwoon University

Mar. 2013 - Feb. 2020

CGPA(Major): 4.42(4.48)/4.5

B.S. in Computer Engineering (Advisor: Cheolsoo Park)

Graduated with First-Class Honors (Rank: 1/74)

## **PUBLICATIONS**

Byeonghwi Kim\*, Minhyuk Seo\*, Jonghyun Choi. Online Continual Learning for Interactive Instruction Following Following Agents. In *ICLR*, 2024.

Byeonghwi Kim, Jinyeon Kim, Yuyeong Kim, Cheolhong Min, Jonghyun Choi. Context-Aware Planning and Environment-Aware Memory for Instruction Following Embodied Agents. In *ICCV*, 2023.

Suvaansh Bhambri\*, **Byeonghwi Kim**\*, Jonghyun Choi. Multi-Level Compositional Reasoning for Interactive Instruction Following. In AAAI (Oral), 2023.

Kunal Pratap Singh\*, Suvaansh Bhambri\*, **Byeonghwi Kim**\*, Roozbeh Mottaghi, Jonghyun Choi. Factorizing Perception and Policy for Interactive Instruction Following. In *ICCV*, 2021.

Byeonghwi Kim, Suvaansh Bhambri, Kunal Pratap Singh, Roozbeh Mottaghi, Jonghyun Choi. Agent with the Big Picture: Perceiving Surroundings for Interactive Instruction Following. In CVPRW, 2021.

Byeonghwi Kim\*, Yuli Sun Hariyani\*, Young-Ho Cho, Cheolsoo Park. Automated White Blood Cell Counting in Nailfold Capillary Using Deep Learning Segmentation and Video Stabilization. In Sensors, 2020.

# HONORS AND AWARDS

1st Place in Generalist Language Grounding Agents Challenge (CVPRW'23)

Jun. 2023

ECLAIR: Event-Cognizant Language Interaction Robots

2nd Place in the ALFRED Challenge (CVPRW'21)

Jun. 2021

Agent with the Big Picture: Perceiving Surroundings for Interactive Instruction Following

2nd Place in the ALFRED Challenge (ECCVW'20)

Aug. 2020

Improving Mask Prediction for Long Horizon Instruction Following

#### ACADEMIC SERVICE

Reviewer: CVPR (2023-2024), ECCV (2024), ICLR (2024), ICML (2024), NeurIPS (2023-2024), AAAI (2024-2025), WACV (2023-2024), ICRA (2022), Ro-MAN (2024)