MyoungGon Kim

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RESEARCH INTERESTS

Human-Computer Interaction (HCI) for Extended Reality(XR)

- Redirected walking
- Mid-air manipulation

Computer Vision for XR

- Sensor Fusion
- Simultaneous Localization and Mapping (SLAM)

EXPERIENCE

Research Engineer in Navigation group, Robot team, Samsung Research Center **Samsung Electronics**, Seoul, Korea

Mar. 2018 ~ Jun. 2021

• Sensor fusion and SLAM development for autonomous driving robot

EDUCATION

Ph.D. student in Computer Science and Engineering

Sep. 2021 ~ Present

Korea University, Seoul, Korea

Supervised by Prof. JungHyun Han

M.Eng. in Computer Science and Engineering

Mar. 2016 ~ Feb. 2018

Korea University, Seoul, Korea Supervised by Prof. JungHyun Han

B.S. in Computer Science and Engineering

Mar. 2009 ~ Feb. 2016

B.E. in Software Technology and Enterprise Program

Korea University, Seoul, Korea

PUBLICATIONS

MyoungGon Kim, JiSeok Ryu, Jaemin Son, and JungHyun Han,

"Virtual object sizes for efficient and convenient mid-air manipulation"

Computer Graphics International (**CGI**), 12~16 March, 2022, published in The Visual Computer, 38.9-10 (2022): 3463-3474.

Joohwan Chae, Donghan Kim, Wooseok Jeong, Eunchan Jo, Won-Ki Jeong, JunYoung Choi, Seung-wook Kim, **MyoungGon Kim**, Jae-Won Lee, Hyechan Lee, JungHyun Han,

"Virtual Air Conditioner's Airflow Simulation and Visualization in AR", Proceedings of the 28th ACM Symposium on Virtual Reality Software and Technology (VRST). 2022.

MyoungGon Kim and JungHyun Han,

"Effects of Switchable DOF for Mid-Air Manipulation in Immersive Virtual Environments" International Journal of Human—Computer Interaction (IJCHI) 2018: 1-13.

MyoungGon Kim, SungIk Cho, Tanh Quang Tran, Seong-Pil Kim, Ohung Kwon, and JungHyun Han, "Scaled Jump in Gravity-reduced Virtual Environments"

IEEE VR, 18~23 March, 2017, published in IEEE Transactions on Visualization and Computer Graphics (**TVCG**), Vol. 23, No. 4, April 2017, pp. 1360-1368.

PATENTS

MyoungGon Kim, Aron Baik, Eunsoll Chang, Mideum Choi, Heejun Choi, "Robot and method for controlling thereof"

- US patent no.: US20220308591A1, Sep. 29, 2022.
- WIPO patent no.: WO2022203150, Sep. 29, 2022.
- Korean patent no.: KR20220039101A, Mar. 23, 2021.

Eunsoll Chang, MyoungGon Kim, Jewoong Ryu, Aron Baik,

"Electronic apparatus and controlling method thereof"

- WIPO patent no.: WO2022114551A1, Jun. 02, 2022.
- Korean patent no.: KR10-2020-0159444, Nov. 25, 2020.

MyoungGon Kim, Jewoong Ryu, Aron Baik, Eunsoll Chang,

"Robot and controlling method thereof"

- US patent no.: not yet assigned (Application no.: 18120192)
- WIPO patent no.: WO2022059937A1, Mar. 24, 2022.
- Korean patent no.: KR20220039101A, Sep. 21, 2020.

RESEARCH PROJECTS

RESEARCH PROJECTS	
 3D pose estimation for evaluating confortable postures Funded by Korea Institute for Advancement of Technology (KIAT) 	Jan. 2023 ~ Present
 Implementation of localization for XR controller by the attached RGBD sensor Funded by Institute for Information & communication Technology Planning & evaluation (IITP) 	Mar. 2022 ~ Dec. 2022
A comparison between performances of mid-air manipulations according to size of virtual objects in IVE and a solution • Funded by Korea Institute for Advancement of Technology (KIAT)	Jul. 2021 ~ Feb. 2022
 3D object manipulation in mobile virtual environment Funded by Samsung Electronics 	Mar. 2017 ~ Feb. 2018
Redirected walking in vertical direction • Funded by National Research Foundation of Korea (NRF)	Mar. 2016 ~ Feb. 2017
HONORS	
KIJ Achievement Award 2022	Feb 14 2023

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HONORS	
KU Achievement Award 2022	Feb. 14, 2023
Granted by Graduate School of Korea University	

Software Technology and Enterprise Program Scholarship Granted by Software Specialized Department, Korea University

• Granted by Office of International Affairs, Korea University

Venture Internship Scholarship Sep. ~ Dec. 2013

Sep. ~ Dec. 2015