SUNGJUNE KIM

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RESEARCH INTERESTS

Deep Learning, Autonomous Driving, Computer Vision

EDUCATION

Korea University, Seoul, South Korea

Mar. 2022 - Current

M.S./Ph.D. in Artificial Intelligence (Advisor: Professor Sangpil Kim)

Dongguk University, Seoul, South Korea

Feb. 2019

(Major) Bachelor of Business Administration in Management (2nd Major) Bachelor of Science in Software Convergence

Gwacheon Foreign Language Highschool

Feb. 2014

English Major / Japanese Minor

EXPERIENCE

Visiting Student Researcher

Mar. - Aug. 2023, Mar. 2024 - Current

Computer Vision Lab, Samsung Advanced Institute of Technology (SAIT)

Suwon, South Korea

- Vision-Language understanding for robot navigation
- Multi-view camera-based 3D occupancy prediction
- Multimodal fusion of RGB camera and LiDAR sensor for 3D object detection

Military Officer

Mar. 2019 - Jun. 2021

ICT Battalion, 22nd Infantry Division, Republic of Korea Army

Gangwon, South Korea

- Wired communication network management (UTP, Optical cables) 1st Lieutenent
- Tactical Multiband Radio (TMR) operations 2nd Lieutenent

PUBLICATIONS

Gyeongrok Oh†, **Sungjune Kim**†, Hyung-gun Chi, Jinkyu Kim, Dongwook Lee, Daehyun Ji, Sungjoon Choi, Sujin Jang*, Sangpil Kim* "Context-Enriched Voxel Queries for Camera-based 3D Occupancy Prediction", in submission, 2024. († Equal Contributions)

Gyeongrok Oh, Heon Gu, **Sungjune Kim**, Sangho Yoon, Jinkyu Kim, Sangpil Kim* "FPANet: Frequency-based Video Demoireing using Frame-level Post Alignment", *in submission*, 2024.

Sungjune Kim, Hadam Baek, Seunggwan Lee, Hyung-gun Chi, Hyerin Lim, Jinkyu Kim*, Sangpil Kim* "Enhanced Motion Forecasting with Visual Relation Reasoning", ECCV 2024.

Sungjune Kim, Hyung-gun Chi, Hyerin Lim, Karthik Ramani, Jinkyu Kim*, Sangpil Kim* "Higher-order Relational Reasoning for Pedestrian Trajectory Prediction", CVPR 2024 (link)

Sungjune Kim, Seongjun Yun, Gyusam Chang, Wonseok Roh, Jung-Tae Lee, Dae-Neung Sohn, Hogun Park*, Sangpil Kim*, "Self-supervised Multimodal Graph Convolutional Network for Collaborative Filtering", Information Sciences (JCR IF Top 10%) 2023 (link)

PATENTS

- Method and mobility device using the method for path prediction through interaction analysis between objects using artificial intelligence (Pending Application No. 1020240038555)
- Self-supervised learning for graph-based item popularity prediction (Pending Application No. 1020230018908)

TALKS & POSTERS

- [Seminar] Naver Invited Seminar Virtual (Dec. 2023) Cold-start Item Popularity Prediction in E-Commerce and Its Future
- [Poster] Naver Search Colloquium (Commerce AI Session) Virtual (May 2022) Multimodal Graph Neural Network for Cold-start Item Popularity Prediction in E-Commerce

AWARDS

• [Best Paper Award] 2023-Fall Best Paper Award, School of Informatics, Korea University

SKILLS

- Programming Languages: Python, Java, C++
- Frameworks: PyTorch, TensorFlow
- Operating Systems: Linux, Windows
- Languages: Korean(Native), English(Fluent)