

Gen Li

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EDUCATION

University of Edinburgh <i>Ph.D. Robotics and Autonomous Systems - Edinburgh, UK</i>	2021.09 - 2025.08 (Expected)
Sungkyunkwan University <i>M.S. Electrical and Computer Engineering - Suwon, South Korea</i>	2018.09 - 2020.08
Xidian University <i>B.S. Electronic and Information Engineering - Xi'an, China</i>	2014.08 - 2018.06

RESEARCH INTERESTS

- Computer Vision, Embodied AI
- Multi-Modal Learning, Vision-Language Models
- Affordance Learning, Robotic Manipulation
- Few-Shot Learning, Learning under Limited Supervision

RESEARCH EXPERIENCE

Visual Affordance and Object Functionality Understanding <i>PhD's Research, Supervisor: Dr. Laura Sevilla-Lara</i>	2021.09 - Present
Prototypical Learning for Few-Shot Semantic Segmentation <i>Visiting Researcher at the UoE, Supervisor: Dr. Laura Sevilla-Lara</i>	2020.10 - 2021.08
Neural Networks for Real-time Semantic Segmentation <i>Master's Research, Supervisor: Prof. Joongkyu Kim</i>	2019.06 - 2020.07
Semantic Image Segmentation based on Deep Learning <i>Undergraduate Thesis, Supervisor: Prof. Cheolkon Jung</i>	2017.11 - 2018.06

SELECTED PUBLICATIONS

- Learning Precise Affordances from Egocentric Videos for Robotic Manipulation [[pdf](#)]
Gen Li, Nikolaos Tsagkas, ..., Sethu Vijayakumar, and Kun Shao, Laura Sevilla-Lara
In Submission
- One-Shot Open Affordance Learning with Foundation Models [[pdf](#)] [[code](#)]
Gen Li, Deqing Sun, Laura Sevilla-Lara, Varun Jampani
IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2024
- LOCATE: Localize and Transfer Object Parts for Weakly Supervised Affordance Grounding
Gen Li, Varun Jampani, Deqing Sun, Laura Sevilla-Lara [[pdf](#)] [[code](#)]
IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2023
- Adaptive Prototype Learning and Allocation for Few-Shot Segmentation [[pdf](#)] [[code](#)]
Gen Li, Varun Jampani, Laura Sevilla-Lara, Deqing Sun, Jonghyun Kim, Joongkyu Kim
IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2021
- DABNet: Depth-wise Asymmetric Bottleneck for Real-time Semantic Segmentation [[pdf](#)] [[code](#)]
Gen Li, Joongkyu Kim
British Machine Vision Conference (BMVC), 2019
- Depth-wise Asymmetric Bottleneck with Point-wise Attention Decoder for Real-time Semantic Segmentation in Urban Scenes [[pdf](#)]
Gen Li, Shenlu Jiang, Inyong Yun, Jonghyun Kim, Joongkyu Kim
IEEE Access (SCI, IF: 4.098)
- Weakly Supervised Temporal Attention 3D Network for Human Action Recognition [[pdf](#)]
Jonghyun Kim, **Gen Li**, Inyong Yun, Cheolkon Jung, Joongkyu Kim
Pattern Recognition (SCI, IF: 7.196)

- Edge and Identity Preserving Network for Face Super-Resolution [[pdf](#)] [[code](#)]
Jonghyun Kim, **Gen Li**, Inyong Yun, Cheolkon Jung, Joongkyu Kim
Neurocomputing (SCI, IF: 4.438)
- Referenceless User Controllable Semantic Image Synthesis [[pdf](#)]
Jonghyun Kim, **Gen Li**, Joongkyu Kim
International Joint Conference on Neural Networks (IJCNN), 2023
- SuperStyleNet: Deep Image Synthesis with Superpixel Based Style Encoder [[pdf](#)] [[code](#)]
Jonghyun Kim, **Gen Li**, Cheolkon Jung, Joongkyu Kim
British Machine Vision Conference (BMVC), 2021
- An Optimized Deep Neural Network Detecting Small and Narrow Rectangular Objects in Google Earth Images [[pdf](#)]
Shenlu Jiang, Wei Yao, Man-sing Wong, **Gen Li**, Zhonghua Hong, Tae-yong Kuc, Xiaohua Tong
IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing (SCI, IF:3.827)
- Perspective-Aware Density Regression for Crowd Counting [[pdf](#)]
Yutong Wang*, **Gen Li***, Qi Zhang, Joongkyu Kim, Huifang Li
IEEE International Conference on Image Processing (ICIP), 2021
- Progressive Face Super-Resolution with Non-Parametric Facial Prior Enhancement [[pdf](#)]
Jonghyun Kim, **Gen Li**, Cheolkon Jung, Joongkyu Kim
IEEE International Conference on Image Processing (ICIP), 2021

WORK EXPERIENCE

Huawei, Noah's Ark Lab, London

2023.07 - 2024.02

Research Intern | Affordance-Oriented Robotic Manipulation

ACADEMIC SERVICE

Reviewer

- Conference - AAAI2024, ECCV 2024, CVPR2024
- Journal - IEEE Transactions on Image Processing (TIP), Neurocomputing

Teaching

University of Edinburgh

- Introductory Applied Machine Learning - Demonstrator and Tutor [Spring 2023]
- Applied Machine Learning - Teaching Assistant [Fall 2022]

Sungkyunkwan University

- Digital Signal Processing - Teaching Assistant [2018-2020]

LANGUAGE PROFICIENCY

- English - IELTS 7.5 (L:8, R:6.5, W:6.5, S:8)
- Korean - TOPIK II level 5
- Chinese - Native

AWARDS AND GRANTS

- Ph.D. - EPSRC funded CDT-RAS Scholarship, 100% tuition waiver and an annual stipend
- M.S. - STEM Scholarship, 100% tuition waiver, Samsung Funding
- State Scholarship for Study Abroad, China Scholarship Council of P.R. China

PROFESSIONAL SKILLS

- Programming Language: Python, C/C++, LaTeX, Matlab, HTML/CSS, etc.
- Frameworks and Tools: Pytorch/Tensorflow/Keras, Git, Docker, Linux Bash, etc.