Gen Li

Informatics Forum-1.45, Edinburgh, UK

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EDUCATION

University of Edinburgh *2021.09 - 2025.08 (Expected)*
Ph.D. Robotics and Autonomous Systems - Edinburgh, UK

Sungkyunkwan University *2018.09 - 2020.08*
M.S. Electrical and Computer Engineering - Suwon, South Korea

Xidian University *2014.08 - 2018.06*
B.S. Electronic and Information Engineering - Xi'an, China

RESEARCH INTERESTS

- Video and Image Segmentation
- Vision-Language Models, Multi-Modal Deep Learning
- Meta Learning, Learning under Limited Supervision

RESEARCH EXPERIENCE

Visual Affordance and Object Functionality Understanding *2021.09 - Present*
PhD's Research, Supervisor: Dr. Laura Sevilla-Lara

Prototypical Learning for Few-Shot Semantic Segmentation *2020.10 - 2021.08*
Visiting Researcher in the UoE, Supervisor: Dr. Laura Sevilla-Lara

Neural Network Design for Real-time Semantic Segmentation *2019.06 - 2020.07*
Master's Research, Supervisor: Prof. Joongkyu Kim

Semantic Image Segmentation Based on Deep Learning *2017.11 - 2018.06*
Undergraduate Thesis, Supervisor: Prof. Cheolkon Jung

SELECTED PUBLICATIONS

- One-Shot Open Affordance Learning with Foundation Models
  Gen Li, Deqing Sun, Laura Sevilla-Lara, Varun Jampani [pdf]
  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-driven Robotic Manipulation

ACADEMIC SERVICE

Reviewer

- Conference - 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.