LEI KE

HKUST, Clearwater Bay, Kowloon, Hong Kong
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EDUCATION

The Hong Kong University of Science and Technology (HKUST) *Sept 2019 - Present*
Ph.D. in Computer Vision, Computer Science and Engineering
Advisor: Prof.Chi-Keung TANG and Yu-Wing TAI

Wuhan University, China *Sept 2014 - June 2018*
Bachelor of Software Engineering, Computer Science School GPA: 3.65/4.0, Top 5%

RESEARCH INTEREST

- Scene Understanding and Reconstruction
- Instance Segmentation & Tracking

PUBLICATIONS

- GSNet: Joint Vehicle Pose and Shape Reconstruction with Geometrical and Scene-aware Supervision.
  Ke, L., Li, S., Sun, Y., Tai, Y. & Tang, C.
  The European Conf. on Computer Vision (**ECCV**), 2020.
- Commonality-Parsing Network across Shape and Appearance for Partially Supervised Instance Segmentation.
  Fan, Q*., **Ke, L*.**, Pei, W., Tang, C & Tai, Y.
  The European Conf. on Computer Vision (**ECCV**), 2020. *** denotes equal contribution.**
- Cascaded Deep Monocular 3D Human Pose Estimation with Evolutionary Training Data.
  Li, S., **Ke, L.**, Pratama, K., Tai, Y., Tang, C. & Cheng, T.
  IEEE Conf. on Computer Vision and Pattern Recognition (**CVPR**), 2020, **Oral presentation**.
- Reflective Decoding Network for Image Captioning.
  Ke, L., Pei, W., Li, R., Shen, X. & Tai, Y.
  IEEE International Conf. in Computer Vision (**ICCV**), 2019.
- Memory-Attended Recurrent Network for Video Captioning.
  Pei, W., Zhang, J., Wang, X., **Ke, L.**, Shen, X. & Tai, Y.
  IEEE Conf. on Computer Vision and Pattern Recognition (**CVPR**), 2019.

EXPERIENCE

HKUST, Hong Kong | Reseach Assistant *Sept 2019 - Present*
Advisor: Prof.Chi-Keung TANG and Yu-Wing TAI
Worked on 3D traffic scene reconstruction (including joint vehicle pose and dense shape reconstruction from monocular image) & 2D instance segmentation under the partially supervised setting. Both the proposed GSNet and CPMask have been accepted by ECCV 2020.

Tencent Youtu X-Lab, Shenzhen | Reseach Intern *Nov 2017 - Aug 2019*
Advisor: Prof.Yu-Wing TAI
Worked on image and video captioning. Proposed the Reflective Decoding Network (RDN) for image captioning, accepted by ICCV2019, which enhances both the long sequence dependency and position perception of words in a caption decoder, achieving the state-of-the-art performance in both standard and complicated image captioning.

Alibaba Group, Hangzhou | Engineering Intern *June 2017 - Oct 2017*
Worked on the product data mining and recommendation system for Taobao department.

Wuhan University, Wuhan | Research Assistant *May 2016 - Feb 2017*
Advisor: Prof.Xiaohui Cui
Utilized traditional machine learning algorithms to conduct the sentiment analysis with social media data.

AWARDS

- Research Travel Grant, HKUST *2019*
- Postgraduate Studentship, HKUST *2019-present*
- COMAP's Mathematical Contest in Modeling, Honorable Prize. *2017*
- Excellent Student Scholarship, Wuhan University *2015-2017*
- National Software Design Competition, Second Prize. *2017*
- National Inspirational Scholarship, Wuhan University *2016*
- National College Students' Mathematics Competition, Third Prize *2015*

SKILLS AND INTERESTS

- Deep Learning Platform: PyTorch, TensorFlow, Caffe and MXNet
- Language: Mandarin(native), English(fluent)
- Programming Language: Python, C/C++, Java, C#, JavaScript.