

# Lu Qi

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## EDUCATION

- **The Chinese University of Hong Kong** **Shatin, Hong Kong**  
*Ph.D.*, Computer Science & Engineering 2017.08 – Present
  - **Supervisor:** Prof. Jiaya Jia
  - **Thesis:** Instance-level Image Understanding with Deep Learning
  - **Expected Graduation Date:** 2021.08
- **Institution of Automation, the Chinese Academy of Sciences** **Haidian, Beijing**  
*Mphil.*, Pattern Recognition & Intelligent System 2014.08 – 2017.07
  - **Supervisor:** Prof. Hong Qiao
  - **Thesis:** Image Recognition with Deep Learning
- **Shandong University** **Jinan, Shandong**  
*B.E.*, Automation 2010.08 – 2014.07
  - Graduation from Honors School as an outstanding graduate
  - **GPA:** 92.4 / 100
  - **Ranking:** 1 / 351

## RESEARCH INTERESTS

- **Computer Vision and Machine Learning**
  - 2D Object Detection, 2D Instance Segmentation, 2D Key-point Detection, 2D Panoptic Segmentation
  - Vision and Language Pretraining
  - Image Generation

## SELECTED PUBLICATIONS

- PointINS: Point-based Instance Segmentation  
**Lu Qi**, Yi Wang, Yukang Chen, Yingcong Chen, Xiangyu Zhang, Jian Sun, Jiaya Jia  
*IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)*, 2021
- Multi-Scale Aligned Distillation for Low-Resolution Detection  
**Lu Qi**, Jason Kuen, Jiuxiang Gu, Zhe Lin, Yi Wang, Yukang Chen, Yanwei Li, Jiaya Jia  
*IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2021
- Amodal Instance Segmentation through KINS Dataset  
**Lu Qi**, Li Jiang, Shu Liu, Xiaoyong Shen, Jiaya Jia  
*IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2019
- Sequential Context Encoding for Duplicate Removal  
**Lu Qi**, Shu Liu, Jianping Shi, Jiaya Jia  
*Thirty-second Conference on Neural Information Processing Systems (NeurIPS)*, 2018
- Path Aggregation Network for Instance Segmentation  
Shu Liu, **Lu Qi**, Haifang Qin, Jianping Shi, Jiaya Jia  
*IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2018

- SC-GAN: Image Synthesis via Semantic Composition  
Yi Wang, **Lu Qi**, Yingcong Chen, Xiangyu Zhang, Jiaya Jia  
*IEEE International Conference on Computer Vision (ICCV)*, 2021
- LAPAR: Linearly-Assembled Pixel-Adaptive Regression Network for Single Image Super-Resolution and Beyond  
Wenbo Li, Kun Zhou, **Lu Qi**, Nianjuan Jiang, Jiangbo Lu, Jiaya Jia  
*Thirty-fourth Conference on Neural Information Processing Systems (NeurIPS)*, 2020
- MuCAN: Multi-Correspondence Aggregation Network for Video Super-Resolution  
Wenbo Li, Xin Tao, Taian Guo, **Lu Qi**, Xiaoyong Shen, Jiaya Jia  
*16th European Conference on Computer Vision (ECCV)*, 2020
- Scale-aware Automatic Augmentation for Object Detection  
Yukang Chen, Yanwei Li, Tao Kong, **Lu Qi**, Ruihang Chu, Lei Li, Jiaya Jia  
*IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2021

## PAPERS IN SUBMISSION

- Open-World Entity Segmentation  
**Lu Qi**, Jason Kuen, Yi Wang, Jiuxiang Gu, Hengshuang Zhao, Lin Zhe, Philip Torr, Jiaya Jia
- Spatial-Temporal Feature Enhancement Network for Underwater Blurred Object Detection  
Hao Zhou, **Lu Qi**, Hai Huang, Xu Yang, Jing Yang
- RGB-D Co-attention Network for Semantic Segmentation  
Hao Zhou, **Lu Qi**, Hai Huang, Xu Yang, Zhaoliang Wan
- Incremental Few-Shot Object Detection with Scale and Centerness-Aware Weight Generation  
Lu Zhang, Xu Yang, **Lu Qi**, Shaofeng Zeng, Zhiyong Liu
- Best-Buddy GANs for Highly Detailed Image Super-Resolution  
Wenbo Li, Kun Zhou, **Lu Qi**, Liying Lu, Nianjuan Jiang, Jiangbo Lu, Jiaya Jia
- ICM-3D: Instantiated Category Modeling for 3D Object Detection  
Ruihang Chu, Yukang Chen, Tao Kong, **Lu Qi**, Lei Li
- An Empirical study of Scale-aware Augmentations for Object Detection  
Yukang Chen, Peizhen Zhang, **Lu Qi**, Yanwei Li, Xiangyu Zhang, Liwei Wang, Jian Sun, Jiaya Jia
- Efficient 3D Object Detection in <1.0M Model Size  
Yukang Chen, Ruihang Chu, Yanwei Li, Tao Kong, **Lu Qi**, Liwei Wang, Jiaya Jia
- Dynamic Scale Training for Object Detection  
Yukang Chen, Peizhen Zhang, Zeming Li, Yanwei Li, Xiangyu Zhang, **Lu Qi**, Jian Sun, Jiaya Jia
- Fully Convolutional Networks for Panoptic Segmentation with Point Supervision  
Yanwei Li, Hengshuang Zhao, Xiaojuan Qi, Yukang Chen, **Lu Qi**, Liwei Wang, Zeming Li, Jian Sun, Jiaya Jia

## ACADEMIC COMPETITIONS

- 1<sup>st</sup> place in 2018 Scene Understanding Challenge for Autonomous Navigation in Unstructured Environments Instance Segmentation Track ECCV-2018 Workshop
- 1<sup>st</sup> place in COCO 2017 Detection Challenge in Instance Segmentation track CVPR-2017 Workshop
- 2<sup>nd</sup> place in COCO 2017 Detection Challenge in Object Detection track CVPR-2017 Workshop
- 1<sup>st</sup> place in LSUN 2017 in Instance Segmentation track ICCV-2017 Workshop
- 3<sup>rd</sup> place in SpaceNet Challenge in Instance Segmentation track TOPCODER 2016

## RESEARCH EXPERIENCE

- **University of Oxford** Jan 2021 – Jun 2021  
 Visiting Student (Supervised by Dr. Hengshuang Zhao and Prof. Philip Torr)  
 – Human Hand Parsing
- **Adobe** Jan 2020 – Nov 2020  
~~Research Intern~~ → Project Collaborator (Due to COVID19)  
 (Supervised by Dr. Jason Kuen, Dr. Jiuxiang Gu and Dr. Zhe Lin)  
 – Efficient Object Detection, Image Segmentation
- **Megvii** Jun 2019 – Dec 2019  
 Research Intern (Supervised by Dr. Xiangyu Zhang and Prof. Jian Sun)  
 – Instance Segmentation.
- **Tencent Youtu Lab** May 2018 – May 2019  
 Research Intern (Supervised by Dr. Shu Liu and Dr. Xiaoyong Shen)  
 – Instance Segmentation
- **Sensetime** Nov 2016 – Nov 2017  
 Research Intern (Supervised by Dr. Jianping Shi)  
 – Instance segmentation

## HONORS & AWARDS

- Hong Kong PhD Fellowship (The highest scholarship for PhD students in Hong Kong) 2017-2021
- Postgraduate Scholarship of University of the Chinese Academy of Sciences 2014-2017
- President Scholarship of Shandong University (highest honor) 2014
- Baogang Steel Scholarship (top 0.5%) 2014
- National Scholarship 2013-2014 2014
- National Scholarship 2012-2013 2013
- National Scholarship 2011-2012 2012
- Excellent graduate in Shandong Province of China 2014
- Excellent Student in Shandong Province of China 2013