

# Yingwei Li

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## CONTACT INFORMATION

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## RESEARCH INTERESTS

My research interests mainly lay in computer vision. Currently I am working on adversarial attack and defense [1,4,5,9,10], medical image processing [5,6,7,8], and neural architecture search [2,3,8]. I am always open to new topics.

## EDUCATION

**Johns Hopkins University** 2018 - present  
Ph.D. in Computer Science  
Advisor: Alan Yuille

**National Taiwan University** Spring 2017  
Exchange Student in Computer Science and Information Engineering  
GPA: 4.0

**Fudan University** 2014 - 2018  
B.S. in Computer Science, *Honor Class*

## EXPERIENCE

**Waymo LLC**, Palo Alto, CA 05/2020 - present  
Software Engineering Intern  
Host: Tiffany Yu-Han Chen

**ByteDance AI Lab**, Palo Alto, CA 05/2019 - 11/2019  
Research Intern  
Mentors: Xiaojie Jin, Xiaochen Lian, Linjie Yang

**Johns Hopkins University**, Baltimore, MD Summer 2017  
Research Assistant & 08/2018 - present  
Advisor: Alan Yuille

**TuSimple**, Beijing, China Summer 2016  
Research Intern  
Mentor: Naiyan Wang

## PUBLICATIONS

- [1] **Yingwei Li**, Song Bai, Cihang Xie, Zhenyu Liao, Xiaohui Shen, Alan Yuille. Regional Homogeneity: Towards Learning Transferable Universal Adversarial Perturbations Against Defenses. In Proceeding of *European Conference on Computer Vision (ECCV)*, Springer, 2020.
- [2] **Yingwei Li**, Xiaojie Jin, Jieru Mei, Xiaochen Lian, Linjie Yang, Cihang Xie, Qihang Yu, Yuyin Zhou, Song Bai, Alan Yuille. Neural Architecture Search for Lightweight Non-Local Networks. In Proceeding of *Conference on Computer Vision and Pattern Recognition (CVPR)*, IEEE, 2020.
- [3] Jieru Mei, **Yingwei Li**, Xiaochen Lian, Xiaojie Jin, Linjie Yang, Alan Yuille, Jianchao Yang. AtomNAS: Fine-Grained End-to-End Neural Architecture Search. In *International Conference on Learning Representations (ICLR)*, 2020.
- [4] **Yingwei Li**, Song Bai, Yuyin Zhou, Cihang Xie, Zhishuai Zhang, Alan Yuille. Learning Transferable Adversarial Examples via Ghost Networks. In proceedings of *The Thirty-Fourth AAAI*

*Conference on Artificial Intelligence (AAAI)*. AAAI Press, 2020.

[5] **Yingwei Li\***, Zhuotun Zhu\*, Yuyin Zhou, Yingda Xia, Wei Shen, Elliot K. Fishman, and Alan L. Yuille. Volumetric Medical Image Segmentation: A 3D Deep Coarse-to-fine Framework and Its Adversarial Examples. In *Deep Learning and Convolutional Neural Networks for Medical Image Computing*, Advances in Computer Vision and Pattern Recognition, Springer, ISBN 978-3-030-13968-1 (\* equally contribution), 2019.

[6] Yuyin Zhou, **Yingwei Li**, Zhishuai Zhang, Yan Wang, Angtian Wang, Elliot K. Fishman, Alan Yuille, Seyoun Park. Hyper-Pairing Network for Multi-Phase Pancreatic Ductal Adenocarcinoma Segmentation. In *Proceedings of the International Conference on Medical Image Computing and Computer-Assisted Intervention (MICCAI)*. Springer, 2019.

[7] Yuyin Zhou, David Dreizin, **Yingwei Li**, Zhishuai Zhang, Yan Wang, Alan Yuille. Multi-Scale Attentional Network for Multi-Focal Segmentation of Active Bleed after Pelvic Fractures. In *Proceedings of 10th International Workshop on Machine Learning in Medical Imaging (MLMI, workshop of MICCAI)*. Springer, 2019.

#### PREPRINTS

[8] Qihang Yu, **Yingwei Li**, Jieru Mei, Yuyin Zhou, Alan L. Yuille. CAKES: Channel-wise Automatic KERNel Shrinking for Efficient 3D Network. *CoRR*, *abs/2003.12798*.

[9] Ziqi Zhang, Xinge Zhu, **Yingwei Li**, Yao Guo, Xiangqun Chen, Dahua Lin. Adversarial Attacks on Monocular Depth Estimation. *CoRR*, *abs/2003.10315*.

[10] Song Bai, **Yingwei Li**, Yuyin Zhou, Qizhu Li, Philip H.S. Torr. Adversarial Metric Attack for Person Re-identification. *CoRR*, *abs/1901.10650*.

#### TALKS

##### **Learning Transferable Adversarial Examples via Ghost Networks**

- AdvML Workshop @ CVPR 2019 June, 2019
- The Thirty-Fourth AAAI Conference on Artificial Intelligence Feb, 2020

##### **Neural Architecture Search for Lightweight Non-Local Networks**

- Kwai Silicon Valley Lab May, 2020

#### SELECTED AWARDS

ICLR Travel Award	2020
First Prize Scholarship from Fudan University Education Development Foundation	2017
SCSK Scholarship	2016
Silver Medal, ACM-ICPC Shanghai Regional Contest	2014
Bronze Medal, China National Olympiad in Informatics	2013

#### WORKSHOP

##### **Adversarial Robustness in the Real World, ECCV 2020**

Organizers: Adam Kortylewski, Cihang Xie, Song Bai, Zhaowei Cai, **Yingwei Li**, Andrei Barbu, Wieland Brendel, Nuno Vasconcelos, Andrea Vedaldi, Philip Torr, Rama Chellappa, Alan Yuille  
Website: <https://eccv20-adv-workshop.github.io/>

#### SERVICE

Reviewer for IEEE TDSC, Neurocomputing, Pattern Recognition, AdvML@CVPR 2020.