## Yingwei Li

CONTACT Information Department of Computer Science (732) 822-7733 3400 North Charles Street yingwei.li@jhu.edu Baltimore, Maryland 21218, USA http://yingwei.li

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

Perception 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 & 08/2018 - present

Summer 2016

 ${\it Research~Assistant}$ 

Advisor: Alan Yuille

**TuSimple**, Beijing, China 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

ICLR Travel Award	2020
First Prize Scholarship from Fudan University Education Development Foundation	2017
SCSK Scholarship	2016

May, 2020

2014

2013

# Workshop

SELECTED

AWARDS

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

Silver Medal, ACM-ICPC Shanghai Regional Contest

Bronze Medal, China National Olympiad in Informatics

Kwai Silicon Valley Lab

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.