Research Background

Fifth-year Ph.D. Candidate with a strong background in Computer vision and Machine Learning. My work focus on developing machine learning techniques for image and video segmentation from weakly-labeled and unsupervised data (ACCV16,ICCV17W,CVPR19W). My recent papers analyze the effect of shadows on images: how to detect (ECCV18) and remove them (ICCV19). I have working experiences in medical imaging and remote sensing data.

Research Experience

Research Assistant.	Stony Brook University, Computer Vision Lab	Aug 2014-Present
Research Assistant.	Stony Brook University, Lynch Lab	Aug 2017-Present

• Weakly-Supervised Semantic Segmentation for Remote Sensing Data.

Research Intern. Ecole Centrale de Lyon, France July-Aug 2019

• Improving Image Inpainting with Image Retrieval.

Research Intern. American International Group, AIG Science May-Aug 2017

• Semantic Instance Segmentation.

Research Assistant. Stony Brook University, School of Medicine. May-Aug 2015

Voxel Registration for 4D Tracking.

Research Intern. POSTECH - South Korea, Machine Learning Lab June-Aug 2012

Selected Publications - Google Scholar

- 1. Le, H., Samaras, D. (2019). Shadow Removal via Shadow Image Decomposition. In ICCV 2019, Seoul, Korea. 2019
- 2. <u>Le, H.</u>, Gonçalves, B., Samaras, D., Lynch, H. (2019). Weakly Labeling the Antarctic: The Penguin Colony Case. In CVPR Workshop (CV4GC), 2019
- 3. <u>Le, H.</u>, Vicente, T., Nguyen V., Nguyen, M-H., & Samaras, D. (2018). A+D Net: Training a Shadow Detector with Adversarial Shadow Attenuation. ECCV 2018, 2018
- 4. Ranjan, V., Le, H., & Nguyen, M-H. (2018). Iterative Crowd Counting. ECCV 2018, 2018
- 5. <u>Le, H.</u>, Yu, C.-P., Zelinsky, G., & Samaras, D. (2017). Co-localization with category consistent CNN features and geodesic distance propagation. In ICCV Workshop 2017, Venice, Italy. 2017
- 6. <u>Le, H.</u>, Nguyen, V., Yu, C.-P., & Samaras, D. (2016). Geodesic distance histogram feature for video segmentation. In ACCV 2016, Taipei, Taiwan. 2016
- 7. Yu, C.-P., <u>Le, H.</u>, Zelinsky, G., & Samaras, D. (2015). Efficient video segmentation using parametric graph partitioning. In ICCV 2015, Santiago, Chile. 2015
- 8. <u>Le, H.</u>, Duong, A. & Tran, S.: Multiple-Classier Fusion Using Spatial Features for Partially Occluded Handwritten Digit Recognition. ICIAR 2013: 124-132. 2013

Education

Ph.D in Computer Science, Stony Brook University	F2014 - Present
B.S in Computer Science, Vietnam National University - HCMUS	F2008 - S2012

Honors & Awards

Vietnam Education Foundation Fellowship - 54.000 USD	
Vietnam National Foundation for Science and Technology Sponsorship - 2.000 USD.	2013
Silver Medal - Vietnam National Informatics Olympiad	2007

Professional Activities

Teaching Assistant: Discrete Math, Computer Graphics, Data Structures Reviewer: CVPR 19, ICCV 19, AAAI 19

Skills

Python, Pytorch, C++, Matlab, Java, LATEX, etc.