# HIEU LE - PH.D. CANDIDATE

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## Education

2014-Now: Ph.D. in Computer Science; Stony Brook University, New York, USA
*Expected Grad.: Sep-2020; GPA: 3.88/4.0.*

2008-2012: BSc. (Honors).; University of Science, Ho Chi Minh City, Vietnam
*GPA: 8.64/10 (Ranked 15 out of 700 intake students)*

## Research Interests

Computer Vision, Machine Learning, Deep Learning, GAN.

## Technical Skills:

Python, Pytorch, Linux, MATLAB, C/C++, LATEX.

## Professional Experience

***[9/2014 – Present]*** Research Assistant, *Computer Vision Lab.,* Stony Brook University
*Advisor: Prof. Dimitris Samaras*

- ***Shadow Detection***. Proposing a GAN-based framework with a physical constraint to generate adversarial training examples. This work was presented at ***ECCV 2018***.
- ***Shadow Removal***. Removing shadows from images via a physical model of shadow, optimized via a deep network. The paper was accepted at ***ICCV 2019***.
- ***Video Segmentation***. Introducing a new feature for video segmentation based on geodesic distance. This work was presented at ***ACCV 2016***.

***[9/2017 – Present]*** Research Assistant, Ecology Department, Stony Brook University
*Advisor: Prof. Heather Lynch*

- ***Semantic Segmentation for satellite images –*** *funded by Iceberg, Nat.Geo. & Microsoft.* Designing a weakly supervised framework for surveying penguin colonies from satellite images. This work was published at ***CVPR-W 18***, and ***OnePlos***.

***[6/2019 – 9/2019]*** Visiting Researcher, Ecole Centrale de Lyon, France

- ***Image Inpainting with Image Retrieval.*** Improving Image inpainting by additional contextual information obtained via image retrieval.

***[5/2017 – 9/2017]*** Research Intern, AIG Science, New York

- ***Semantic Instance Segmentation.*** Designing a framework for semantic instance segmentation using a deep network and CRF. The model is employed in an automatic vehicle damage assessment system.

***[5/2015 – 8/2015]*** Research Intern, School of Medicine, Stony Brook University

- ***4D registration:*** 4D volume registration for fluid tracking in mice's optical nerve system.

***[6/2012 – 8/2012]*** Research Intern, Machine Learning Lab., POSTECH, Korea

- ***Partially-Occluded Handwritten Digits Recognition:*** Using multiple-classifier fusion to recognize partially-occluded digits. This method was published in ICIAR 2013

## Awards

2019 Microsoft AI for Earth Travel Grant.
- *Travel grant for attending AI4Earth Summit - Seattle.*

2014 Vietnam Education Foundation Fellowship - 54.000 USD
- *Highly selective, granted only for ~10 computer-science students national-wise.*

2013 Vietnam NAFOTES Sponsorship - 2.000 USD
- *Travel grant awarded to outstanding science projects.*

2007 Silver Medal - Vietnam National Informatics Competition

## Selected Publications – Google Scholar

1. **Le, Hieu**, Samaras, D. Shadow Removal via Shadow Image Decomposition. In *Proceedings of International Conference on Computer Vision (ICCV), 2019,* Seoul, Korea.
2. **Le, Hieu**, Vicente, T.F.Y., Nguyen, V., Hoai, M. & Samaras, D. A+D Net: Training a Shadow Detector with Adversarial Shadow Attenuation. In *Proceedings of European Conference on Computer Vision (ECCV), 2018*, Munich, Germany.
3. **Le, Hieu**, Nguyen, V., Yu, CP., Samaras. D., Geodesic Distance Histogram Feature for Video Segmentation. In *Proceedings of the Asian Conference on Computer Vision (ACCV), 2016*, Taipei, Taiwan.
4. **Le, Hieu**, Gonçalves, B., Samaras, D., Lynch, H. Weakly Labeling the Antarctic: The Penguin Colony Case. In *Proceedings of the Conference on Computer Vision and Pattern Recognition (CVPR) - CV4GC,* 2019.
5. **Le, Hieu**, Yu, C.-P., Zelinsky, G., & Samaras, D. Co-localization with category consistent CNN features and geodesic distance propagation. In *Proceedings of the IEEE International Conference on Computer Vision (ICCV) Workshop, 2017.*
6. **Le, Hieu**, An T. D., Son T. T. Multiple-Classifier Fusion Using Spatial Features for Partially Occluded Handwritten Digit Recognition. In *Proceeding of the International Conference Image Analysis and Recognition 2013*, Póvoa de Varzim, Portugal.
7. Yu, CP., **Le, Hieu**, Zelinsky, G., Samaras, D., Efficient Video Segmentation using Parametric Graph Partitioning. In *Proceedings of the IEEE International Conference on Computer Vision (ICCV) 2015*, Santiago, Chile.
8. Ranjan, V., **Le, Hieu**, Nguyen, M-H. (2018). Iterative Crowd Counting. In *Proceedings of European Conference on Computer Vision (ECCV), 2018*, Munich, Germany.

## Professional Activities

- **Teaching Assistant:** Discrete Math (Ph.D. course), Computer Graphics (Ph.D. course), Data Structures.
- **Reviewer**: CVPR (2019, 2020); ICCV 2019; AAAI 2020.