

HIEU LE - PH.D. CANDIDATE

Department of Computer Science, Stony Brook University

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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 in 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 – 2000 USD.
 - *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-Classifer 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.