

Tsung-Yu Lin

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University of Massachusetts Amherst
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EDUCATION

PhD in Computer Science, College of Information and Computer Science
University of Massachusetts Amherst Aug. 2014 ~ Feb. 2020
Thesis: Higher-Order Representations for Visual Recognition

Master in Computer Science, Department of Computer Science
National Tsing Hua University, Hsinchu, Taiwan Sep. 2008 ~ Jun. 2010
Thesis: Combining Shape Prior with Non-Rigid SfM for Recovering Specific 3D Deformable Surface

Bachelor of Science, Department of Computer Science
National Tsing Hua University, Hsinchu, Taiwan Sep. 2004 ~ Jun. 2008
Major: Computer Science
Minor: Mathematics

WORKING EXPERIENCE

*PhD student*¹ Sep. 2019 ~ Feb. 2020
College of Information and Computer Science, University of Massachusetts Amherst
Supervisor: Prof. Subhransu Maji

Intern June 2019 ~ Aug. 2019
Facebook Applied Machine Learning
Supervisor: Prof. Alex Berg and Prof. Tamara Berg

Teaching Assistant Jan. 2019 ~ May 2019
College of Information and Computer Science, University of Massachusetts Amherst
Supervisor: Prof. Subhransu Maji

Graduate Research Assistant Sep. 2017 ~ Jan. 2019
College of Information and Computer Science, University of Massachusetts Amherst
Supervisor: Prof. Subhransu Maji

Intern June 2017 ~ Nov. 2017
Amazon AWS Deep Learning
Supervisor: Prof. R. Manmatha and Prof. Deva. Ramanam

Graduate Research Assistant Jan. 2017 ~ May 2017
College of Information and Computer Science, University of Massachusetts Amherst
Supervisor: Prof. Subhransu Maji

¹Supported by the dissertation writing fellowship during Sep. 2019 to Feb. 2020

Teaching Assistant Sep. 2016 ~ Jan. 2017
College of Information and Computer Science, University of Massachusetts Amherst
Supervisor: Prof. Subhransu Maji

Graduate Research Assistant Sep. 2014 ~ Aug. 2016
College of Information and Computer Science, University of Massachusetts Amherst
Supervisor: Prof. Subhransu Maji

Research Assistant Oct. 2011 ~ May. 2014
Institute of Information Science, Academia Sinica, Taiwan
Supervisor: Dr. Tyng-Luh Liu

Political Warfare Officer Mar. 2011 ~ Sep. 2011
Second Lieutenant, mandatory military service at ROC Army.

Intern Jul. 2011 ~ Aug. 2011
Advanced Technology Development Div., MediaTek Incorporation

Graduate Research Assistant Sep. 2008 ~ Jun. 2010
Computer Science Department, National Tsing Hua University, Taiwan
Supervisor: Prof. Shang-Hong Lai

TEACHING EXPERIENCE	Teaching Assistant	CMPSCI 370 Introduction to Computer Vision
		College of Information and Computer Sciences, UMass Amherst 2019 Spring
	Teaching Assistant	CMPSCI 670 Computer Vision
	College of Information and Computer Sciences, UMass Amherst 2016 Fall	
	Teaching Assistant	CS 3332 Probability and Statistics
	Department of Computer Science, National Tsing Hua University 2009 Fall	

HONORS

<i>Dissertation writing fellowship from UMass CICS</i>	
<i>Selected to attend CVPR doctoral consortium</i>	CVPR2019
<i>Nominated as outstanding reviewers</i>	CVPR 2018
<i>Student Travel Grant to ICCV</i>	
<i>The Robin Popplestone Memorial Fellowship</i>	

PUBLICATIONS *Journal*

1. **Bilinear Convolutional Neural Networks for Fine-grained Visual Recognition**
Tsung-Yu Lin, Aruni RoyChowdhury, and Subhransu Maji
PAMI 2017
2. **MistNet: Measuring Historical Bird Migration in the US Using Archived Weather Radar Data and Convolutional Neural Networks**
Tsung-Yu Lin, Kevin Winner, Garrett Bernstein, Abhay Mittal, Adriaan M. Dokter, Kyle G. Horton, Cecilia Nilsson, Benjamin M. Van Doren, Andrew Farnsworth, Frank A. La Sorte, Subhransu Maji, and Daniel Sheldon
Methods in Ecology and Evolution, 2019

3. **Phenology of nocturnal avian migration has shifted at the continental scale**

Kyle G Horton, Frank A La Sorte, Daniel Sheldon, Tsung-Yu Lin, Kevin Winner, Garrett Bernstein, Subhransu Maji, Wesley M Hochachka, and Andrew Farnsworth

Nature Climate Change, 2020

Conference

1. **Second-order Democratic Aggregation**

Tsung-Yu Lin, Subhransu Maji, and Piotr Koniusz
ECCV 2018, Munich, Germany

2. **Improved Bilinear Pooling with CNNs**

Tsung-Yu Lin, and Subhransu Maji
BMVC 2017, London, United Kingdom (oral presentation)

3. **Visualizing and Understanding Deep Texture Representations**

Tsung-Yu Lin, and Subhransu Maji
CVPR 2016, Las Vegas, Nevada

4. **One-to-many Face Recognition with Bilinear CNNs**

Aruni RoyChowdhury, Tsung-Yu Lin, Subhransu Maji, and Erik Learned-Miller
WACV 2016, Lake Placid, New York

5. **Bilinear CNN Models for Fine-grained Visual Recognition**

Tsung-Yu Lin, Aruni RoyChowdhury, and Subhransu Maji
ICCV 2015, Santiago, Chile (oral presentation)

6. **Efficient Binary Codes for Extremely High-dimensional Data**

Tsung-Yu Lin and Tyng-Luh Liu
ICIP 2014, Paris, France

7. **People Localization in A Camera Network Combining Background Subtraction and Scene-aware Human Detection**

Tung-Ying Lee, Tsung-Yu Lin, Szu-Hao Huang, Shang-Hong Lai, and Shang-Chih Hung
MMM 2011, Taipei, Taiwan

Technical reports and preprints (non peer-reviewed)

1. **Implicit Sparse Code Hashing**

Tsung-Yu Lin, Tsung-Wei Ke and Tyng-Luh Liu
arXiv:1512.00130, 2015

PROFESSIONAL Conference and Journal Reviewing SERVICE

- Computer Vision and Pattern Recognition (CVPR 2018, 2019, 2020)
- International Conference on Computer Vision (ICCV 2017, 2019)
- British Machine Vision Conference (BMVC 2019)
- IEEE Transactions on Pattern Analysis and Machine Intelligence
- International Journal of Computer Vision