

Yang Wang

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- Education** **Stony Brook University (SBU)** **9/2014- (Expected) 12/2019**
Ph.D. in Computer Vision
 • Mentor: Prof. Minh Hoai Nguyen
- University of Science and Technology of China (USTC)** **9/2009-7/2013**
B.E. in Electronic Engineering
- Research** Computer Vision; Deep Learning; Video Understanding; Human Action Recognition;
- Publication**
- (P1) **Yang Wang**, Minh Hoai. “Pulling Actions out of Context: Explicit Separation for Effective Combination”, *IEEE Conference on Computer Vision and Pattern Recognition (CVPR 2018)*.
- (P2) **Yang Wang**, Vinh Tran, Minh Hoai. “Eigen-Evolution Dense Trajectory Descriptors”, *IEEE International Conference on Automatic Face and Gesture Recognition (FG 2018)*.
- (P3) Wen Zhong, Cong Xie, Yuan Zhong, **Yang Wang**, Wei Xu, Shenghui Cheng, Klaus Mueller. “Evolutionary Visual Analysis of Deep Neural Networks”, *International Conference on Machine Learning (ICML 2017) Workshop on Visualization for Deep Learning*.
- (P4) **Yang Wang**, Minh Hoai. “Improving Human Action Recognition by Non-action Classification”, *IEEE Conference on Computer Vision and Pattern Recognition (CVPR 2016)*.
- (P5) Ning Wang, **Yang Wang**, Yaodong Yang, Yi Shen, Ao Li. “miRNA Target Prediction Based on Gene Ontology”, *International Symposium on Computational Intelligence and Design (ISCID 2013)*.
- Preprint**
- (Q1) **Yang Wang**, Vinh Tran, Minh Hoai. “Attentive Action and Context Factorization”, in anonymous submission.
- (Q2) **Yang Wang**, Haibin Huang, Chuan Wang, Tong He, Jue Wang, Minh Hoai. “GIF2Video: Color Dequantization and Temporal Interpolation of GIF images”, in anonymous submission.
- (Q3) Zhengwei Wei, **Yang Wang**, Justin Zhang, Minh Hoai. “Can I Give You a Hand? Hand Annotation, Verification, and Detection in the Wild”, in anonymous submission.
- (Q4) Yuqian Zhou, Jianbo Jiao, Haibin Huang, **Yang Wang**, Jue Wang, Honghui Shi, Thomas Huang. “When AWGN-based Denoiser Meets Blind Real Noise”, in anonymous submission.
- (Q5) **Yang Wang**, Vinh Tran, Minh Hoai. “Eigen Evolution Pooling for Human Action Recognition”, in anonymous submission.
- (Q6) **Yang Wang**, Minh Hoai. “Unsupervised Video Flow Estimation with Compositional Architecture and Cycle-consistency”, in anonymous submission.

Honor & Award	CS Department Chair Fellowship, SBU	9/2014
	Research Fellowship, National University Student Innovation Program	4/2013
	Meritorious Winner, MCM (Mathematical Contest in Modeling)	3/2013
	GDC-Tech Outstanding Student Scholarship, USTC	10/2012
	Robot Game Contest, Enter the Final, Team Leader, USTC	10/2011
	National Endeavor Scholarship, USTC	9/2011
	Outstanding Student Scholarship, USTC	9/2010
	Physics Olympiad Second Prize, Shandong Province	3/2009
Experience	Research Assistant @ Computer Vision Lab, SBU	12/2014-Present
	<ul style="list-style-type: none"> • Advisor: Prof. Minh Hoai Nguyen • Topic: Video Understanding and Human Action Recognition <ul style="list-style-type: none"> – recognize and prune non-action video segments – separate human action from context using conjugate samples – eigen evolution pooling for temporal feature aggregation – separate action and context attentions in videos • Topic: Object Detection, Unsupervised Learning, Visualization, etc. <ul style="list-style-type: none"> – human hand detection and orientation estimation in the wild – visualize the learning process of deep neural networks – unsupervised ConvNet for flow estimation 	
	Research Internship @ Megvii (Face⁺⁺) Research USA	5/2018-8/2018
	<ul style="list-style-type: none"> • Host: Haibin Huang (Research Scientist), Jue Wang (Director) • Topic: Color Dequantization and Temporal Interpolation of GIF images <ul style="list-style-type: none"> – proposed GIF2Video, the first learning-based method for enhancing the visual quality of GIFs in the wild; introduced two large datasets, namely GIF-Faces and GIF-Moments, for both training and evaluation. 	
	Research @ Information Processing Center, USTC	9/2012-6/2013
	<ul style="list-style-type: none"> • Advisor: Prof. Houqiang Li • Topic: Video Super Resolution (Undergrad Dissertation) <ul style="list-style-type: none"> – modeled imaging process (optical flow, blur kernel, down-sampling, noise) as a Bayesian network; derived formulation from MAP principle; solved optimization using IRLS and Conjugate Gradient approach. 	
	National University Innovation Program, China	8/2012-3/2013
<ul style="list-style-type: none"> • Advisor: Prof. Ao Li • Topic: miRNA Target Prediction using Data-Driven Approach <ul style="list-style-type: none"> – mRNA-miRNA dataset collection by parsing mirTarbase webpage and Microarray data; feature selection from gene sequence and functional information using mRMR; significant improvement on miRNA target prediction. 		
Math Contest in Modeling, Meritorious Winner	2/2013	
<ul style="list-style-type: none"> • Advisor: Prof. Ao Li • Topic: Water Strategy Analysis of China 		

- modeled water movement between provinces as a graph; solved optimization using Metropolis algorithm.

USTC-MSRA Smart Campus Program

2/2012-6/2012

- Topic: USTC Social Network

- built a social network using UCHome; redesigned interface and functionality, enabling students to share posts, search books, follow classes, etc.

USTC Robot Contest, Team Leader, Enter the Final

6/2011-9/2011

- Topic: Human-assisting Robots

- built a prototype robot that assists blind people to walk at home and on street; our robot relies on assorted sensors (ultrasonic/infrared/color sensors) and can be controlled with voice commands (Lingyang-SPCE061A).

Academic Service

Conference Reviewer

- CVPR 2018, 2019; ECCV 2018; ICVGIP 2016, 2018;

Summer Project Mentorship, CS, SBU

- Justin Zhang. Regional finalist of Siemens science competition. 2017
- Abhinand Sivaprasad. Regional finalist of Siemens science competition. 2015

Teaching Assistant, CS, SBU

- CSE-114/130: Introduction to Programming in Java/C
- CSE-214: Data Structures & Algorithms in Java
- CSE-512: Machine Learning

Skill

Programming Languages: Python, C/C++/Java, Matlab, Lua
Libraries: PyTorch/Torch, Tensorflow, Caffe, OpenCV, OpenGV
Languages: English, Chinese