

Gang YU, Lead Researcher, Megvii Face⁺⁺

CONTACT INFORMATION	Room 316, Raycom Info Tech Tower A, No. 2 Kexueyuan South Road Haidian District, Beijing, 100190 PRC	Phone: +86 13621942896 Email: iskicy@gmail.com, Homepage: https://skicy.github.io/
EDUCATION	Nanyang Technological University , Singapore Ph.D. in Information Engineering, Advisor: Professor Junsong Yuan Shanghai Jiao Tong University , China M.S. in Computer Science, Advisor: Professor Hongtao Lu Shandong University , China B.S. in Applied Mathematics,	Aug 2010 to Jan 2014 Sep 2007 to Mar 2010 Sep 2003 to Jun 2007
PROFESSIONAL EXPERIENCE	Megvii (Face⁺⁺) , Beijing Research Scientist Leader for the Detection team Nanyang Technological University , Singapore Research Fellow Advisor: Professor Junsong Yuan Microsoft Research , Redmond, U.S. Research Intern Advisor: Dr. Zicheng Liu Nanyang Technological University , Singapore Project Officer Advisor: Professor Junsong Yuan	Dec 2014 to now Feb 2014 to Nov 2014 May 2013 to Aug 2013 May 2010 to Aug 2010
BOOK PUBLICATIONS	1. Gang Yu , Junsong Yuan, and Zicheng Liu “Human Action Analysis with Randomized Trees”, <i>Springer</i> , 2015.	
PRE-PRINTS	1. Zeming Li, Chao Peng, Gang Yu , Xiangyu Zhang, Yangdong Deng, Jian Sun, “Light-Head R-CNN: In Defense of Two-Stage Object Detector.” Arxiv, 2017. 2. Chao Peng, Tete Xiao, Zeming Li, Yuning Jiang, Xiangyu Zhang, Kai Jia, Gang Yu , Jian Sun, “MegDet: A Large Mini-Batch Object Detector.” Arxiv, 2017. COCO2017 Detection Challenge winner 3. Yilun Chen, Zhicheng Wang, Yuxiang Peng, Zhiqiang Zhang, Gang Yu , Jian Sun, “Cascaded Pyramid Network for Multi-Person Pose Estimation.” Arxiv, 2017. COCO2017 Keypoint Challenge winner 4. Jianfeng Wang, Ye Yuan, Gang Yu , “Face Attention Network: An Effective Face Detector for the Occluded Faces.” Arxiv, 2017.	

JOURNAL
PUBLICATIONS

1. **Gang Yu**, Junsong Yuan, and Zicheng Liu, "Propagative Hough Voting for Human Activity Detection and Recognition." *IEEE Trans. on Circuits and Systems for Video Technology (T-CSVT)*, Vol.25, Issue 1, pp.87-98, 2014.
2. **Gang Yu**, Junsong Yuan, and Zicheng Liu, "Action Search by Example using Randomized Visual Vocabularies." *IEEE Trans. on Image Processing (T-IP)*, Vol.22, Issue 1, pp. 377-390, 2013.
3. **Gang Yu**, Norberto A., Junsong Yuan, and Zicheng Liu, "Fast Action Detection via Discriminative Random Forest Voting and Top-K Subvolume Search." *IEEE Trans. on Multimedia (T-MM)*, Vol.13, Issue 3, pp. 507-517, 2011.
4. **Gang Yu**, Zhiwei Hu, Hongtao Lu, and Wenbin Li, "Robust Object Tracking with Occlusion Handle." *Neural Computing and Applications*, Vol.20, Issue. 7, pp. 1027-1034, 2011
5. **Gang Yu**, Xianpeng Wang, and Hongtao Lu, "Efficient Routing Strategy on Scale-free Networks." *Modern Physics Letters B*, Vol. 23, No. 11, pp. 1377-1389, 2009
6. Xianpeng Wang, **Gang Yu**, and Hongtao Lu, "A Local Information-based Routing Strategy on the Scale-free Network." *Modern Physics Letters B*, Vol. 23, No. 10, pp. 1291-1301, 2009

CONFERENCE
PUBLICATIONS

1. Zeming Li, Yilun Chen, **Gang Yu**, Xiangyu Zhang, Jian Sun , "R-FCN++: Towards Accurate Region-based Fully Convolutional Networks for Object Detection." *Association for the Advancement of Artificial Intelligence (AAAI)*, 2018.
2. Chao Peng, Xiangyu Zhang, **Gang Yu**, Guiming Luo, Jian Sun, "Large Kernel Matters – Improve Semantic Segmentation by Global Convolutional Network." *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2017.
3. **Gang Yu**, Junsong Yuan, "Fast Action Proposals for Human Action Detection and Search." *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2015.
4. **Gang Yu**, Zicheng Liu, Junsong Yuan, "Discriminative Orderlet Mining For Real-time Recognition of Human-Object Interaction." *Asian Conference on Computer Vision (ACCV)*, 2014.
5. **Gang Yu**, Junsong Yuan, "Scalable Forest Hashing for Fast Similarity Search." *International Conference on Multimedia and Expo (ICME)*, 2014.
6. **Gang Yu**, Junsong Yuan, and Zicheng Liu, "Propagative Hough Voting for Human Activity Recognition." *IEEE Conference on European Conference on Computer Vision (ECCV)*, 2012.
7. Yuning Jiang, **Gang Yu**, Junsong Yuan, "Randomized Spatial Partition for Scene Recognition." *IEEE Conference on European Conference on Computer Vision (ECCV)*, 2012.
8. **Gang Yu**, Junsong Yuan, and Zicheng Liu, "Predicting Human Activities using Spatio-Temporal Structure of Interest Points." *ACM Multimedia Conference (ACM MM)*, 2012.
9. **Gang Yu**, Junsong Yuan, and Zicheng Liu, "Unsupervised Random Forest Indexing for Fast Action Search." *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2011.

10. **Gang Yu**, Junsong Yuan, and Zicheng Liu, "Real-time Human Action Search using Random Forest based Hough Voting." *ACM Multimedia Conference (ACM MM)*, 2011.
11. **Gang Yu**, Zhiwei Hu, and Hongtao Lu, "Robust Incremental Subspace Learning for Object Tracking." *International Conference on Neural Information Processing*, 2009.
12. **Gang Yu**, and Hongtao Lu, "Illumination Invariant Object Tracking with Incremental Subspace Learning." *IEEE International Conference on Image and Graphics*, 2009.

HONORS AND AWARDS

COCO 2017 Detection, Keypoint Challenge Winner, 2017
 Microsoft Research Asia Fellowship, 2011
 Research Scholarship from Nanyang Technological University, 2010 to 2014
 Outstanding Graduate student of Shanghai City, P.R.China, 2010
 Samsung Scholarship, Shanghai Jiao Tong University, 2008
 First Prize of learning scholarship from Shanghai Jiao Tong University, 2008

PRESENTATIONS

Invited Talk at Beijing Institute of Technology, Beijing, May 2017
 Title: Large Kernel for Image Segmentation and Object Detection

Tutorial at Pacific Rim Conference on Multimedia, Singapore, Dec 2012
 Title: Human action analysis with 2D and 3D sensors, with Junsong Yuan, Zicheng Liu

Invited Talk at National University of Singapore, Singapore, Oct 2012
 Title: Human Action Recognition and Localization by Randomized Trees

Speaker at Graduate Students Workshop in IEEE CAS Singapore Chapter, Sep 2011
 Title: Unsupervised Random Forest Indexing for Fast Action Search
 (Best speaker award)

TEACHING EXPERIENCE

Nanyang Technological University, Singapore
Lab EE3072/EE2073/IM313 Game Programming, 2012-2013 Spring Semester
Tutorial EE4758 Computer Security, 2012-2013 Fall Semester
Tutorial EE4791 Database Systems, 2011-2012 Spring Semester

Shanghai Jiao Tong University, China
Tutorial Data Structure and Algorithms, 2007-2008 Fall Semester

ACADEMIC SERVICE

Journal Reviewer:
 International Journal of Computer Vision
 IEEE Transactions on Image Processing
 IEEE Transactions on Circuits and Systems for Video Technology
 ACM Transactions on Multimedia Computing, Communications and Applications
 Machine Vision and Applications, Springer
 Multimedia System, Springer

Conference Reviewer:
 International Conference on Computer Vision and Pattern Recognition, 2017, 2018
 Automatic Face and Gesture Recognition, 2018
 International Conference on Multimedia and Expo, 2016, 2017
 International Conference on Multimedia and Expo, 2016, 2017

Asian Conference on Computer Vision, 2014
Computer Graphics International Conference, 2013

Volunteer:
Student Volunteer for ICML 2011

PROGRAMMING SKILLS C/C++, Matlab, C#, Python, SQL, OpenCV, .Net