Wei YANG

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Education

2014 - Current **The Chinese University of Hong Kong**, Hong Kong SAR, China
Department of Electronic Engineering
Ph.D. in Electronic Engineering (Expected August 2018)
Supervisor: Professor Xiaogang Wang

2011 - 2014 **Sun Yat-sen University**, Guangzhou, China
M.S. in Computer Software and Engineering

2007 - 2011 **Sun Yat-sen University**, Guangzhou, China
B.E. in Software Engineering

Research Interests

Computer Vision Human pose estimation, scene understanding, image classification
Machine Learning Deep learning

Experience

10/2017 - Present Visiting Scholar
Robotics Institute, Carnegie Mellon University, Pittsburgh, PA, United States
I am working with Professor Abhinav Gupta on a robotics navigation project.

07/2010 - 09/2010 Software Engineering Intern
Tencent, Inc. Shenzhen, China
I developed a Content Management System for internal use based on PHP/HTML/CSS/JS.

Publications

Conference Papers

- 3D Human Pose Estimation in the Wild by Adversarial Learning
  Wei Yang, Wanli Ouyang, Xiaolong Wang, Jimmy Ren and Xiaogang Wang
  IEEE Conference on Computer Vision and Pattern Recognition (*CVPR*), 2018 (Acceptance Rate 29%%)
- Learning Feature Pyramids for Human Pose Estimation
  Wei Yang, Shuang Li, Wanli Ouyang, Hongsheng Li and Xiaogang Wang
  IEEE International Conference on Computer Vision (*ICCV*), 2017 (Acceptance Rate 621 / 2143 = 28.9%)
- Identity-Aware Textual-Visual Matching with Latent Co-attention
  Shuang Li, Tong Xiao, Hongsheng Li, **Wei Yang**, Xiaogang Wang
  IEEE International Conference on Computer Vision (*ICCV*), 2017 (Acceptance Rate 621 / 2143 = 28.9%)
- Multi-Context Attention for Human Pose Estimation
  Xiao Chu*, **Wei Yang***, Wanli Ouyang, Cheng Ma, Alan Yuille and Xiaogang Wang
  IEEE Conference on Computer Vision and Pattern Recognition (*CVPR*), 2017 (* indicates equal contribution, Acceptance Rate 29.6%)
- End-to-End Learning of Deformable Mixture of Parts and Deep Convolutional Neural Networks for Human Pose Estimation
  Wei Yang, Wanli Ouyang, Hongsheng Li and Xiaogang Wang
  IEEE Conference on Computer Vision and Pattern Recognition (*CVPR*), 2016 (**Oral**, Acceptance Rate 83/ 2145 = 3.9%)
- Multi-task Recurrent Neural Network for Immediacy Prediction
  Xiao Chu, Wanli Ouyang, **Wei Yang** and Xiaogang Wang
  in Proceedings of IEEE International Conference on Computer Vision (*ICCV*), 2015 (**Oral**, Acceptance Rate 56/1698 = 3.3%)

- Clothing Co-Parsing by Joint Image Segmentation and Labeling
  Wei Yang, Ping Luo and Liang Lin
  IEEE Conference on Computer Vision and Pattern Recognition (*CVPR*), 2014 (Acceptance Rate 540/1807 = 29.88%)
- Data-Driven Scene Understanding by Adaptive Exemplar Retrieval
  Xionghao Liu, **Wei Yang**, Ya Li, Liang Lin, and Jian-Huang Lai
  in Proceedings of IEEE International Conference on Multimedia and Expo (*ICME*), 2014 (Acceptance Rate 212/716 = 29.61%)
- Learning Contour-Fragment-based Shape Model with And-Or Tree Representation
  Liang Lin, Xiaolong Wang, **Wei Yang**, and Jian-Huang Lai
  IEEE Conference on Computer Vision and Pattern Recognition (*CVPR*), 2012 (Acceptance Rate 466/1933 = 24.1%)
- Interactive CT image segmentation with online discriminative learning
  Wei Yang, Xiaolong Wang, Liang Lin, Chengying Gao
  in Proceedings of IEEE International Conference on Image Processing (*ICIP*), 2011 (Acceptance Rate NA/2245 = 40.6%)

Journal Papers

- Clothes Co-Parsing via Joint Image Segmentation and Labeling with Application to Clothing Retrieval
  Xiaodan Liang, Liang Lin, **Wei Yang**, Ping Luo, Junshi Huang, and Shuicheng Yan
  IEEE Transactions on Multimedia (*T-MM*), 2016
- Inference With Collaborative Model for Interactive Tumor Segmentation in Medical Image Sequences
  Liang Lin, **Wei Yang**, Chenglong Li, Jin Tang, Xiaochun Cao
  IEEE Transactions on Cybernetics (*T-Cybernetics*), 2015
- Data-Driven Scene Understanding with Adaptively Retrieved Exemplars
  Xionghao Liu, **Wei Yang**, Liang Lin, Qing Wang, Zhaoquan Cai, Jian-Huang Lai
  IEEE Multimedia (*MM*), 2015
- Discriminatively Trained And-Or Graph Models for Object Shape Detection
  Liang Lin, Xiaolong Wang, **Wei Yang**, and JianHuang Lai
  IEEE Transactions on Pattern Analysis and Machine Intelligence (*T-PAMI*), 2015

Projects

- PoseTrack Challenge, 2017
  PoseTrack is a large-scale benchmark for human pose estimation and tracking in video.
  I proposed a feature pyramid learning approach for human pose estimation.
  Our team won the **2nd places** in all two valid tasks. Leaderboard: https://posetrack.net/leaderboard.php

- Open Source Software: PyTorch Pose, 2017
  I developed a general framework for 2D single human pose estimation based on PyTorch.
  Support multiple datasets, multiple SOTA models, and multi-GPUs training.
  170+ stars on GitHub: https://github.com/bearpaw/pytorch-pose
  Top 1 performance on the MPII dataset. Leaderboard (*Yang et al., ICCV'17*): http://human-pose.mpi-inf.mpg.de/#results
- Open Source Software: PyTorch Classification, 2017
  I developed a general framework for popular image classification benchmarks based on PyTorch.
  140+ stars on GitHub: https://github.com/bearpaw/pytorch-classification
- Clothing Parsing Dataset, 2014
  I led the team to build a clothing dataset with people wearing various types of clothes.
  The dataset is open source and has **120+ stars** on GitHub: https://github.com/bearpaw/clothing-co-parsing

Honors and Awards

2017	2nd place	PoseTrack Challenge 2017
2012	National Scholarship	Ministry of Education, China
2011	*Silver Medal*	Amway University IT Project Competition
2010	3rd Prize Scholarship	Sun Yat-sen University
2009	3rd Prize	Computer Programming Competition, , Sun Yat-sen University
2008 and 2009	2rd Prize Scholarship	Sun Yat-sen University

Professional Activities

2018	Reviewer	IEEE Conference on Computer Vision and Pattern Recognition (CVPR)
2018	Reviewer	IEEE Conference on Virtual Reality and 3D User Interfaces (VR)
2017	Reviewer	IEEE International Conference on Computer Vision (ICCV)
2017	Reviewer	IEEE Transactions on Circuits and Systems for Video Technology (TCSVT)
2017	Reviewer	International Joint Conference on Artificial Intelligence (IJCAI)
2017	Reviewer	IEEE Transaction on Cybernetics (TCYB)
2016	Reviewer	Elsevier Journal of Neurocomputing (NEUCOM)
2016	Reviewer	Elsevier Journal of Pattern Recognition (PR)

Teaching

2017,	spring	Tutor, Introduction to Deep Learning (ELEG 5491), CUHK
2016,	fall	Tutor, Complex Analysis and Differential Equations (ENGG 2420A), CUHK
2016,	spring	Tutor, Probability and Statistics for Engineers (ENGG 2430D), CUHK
2015,	fall	Tutor, Complex Analysis and Differential Equations for Engieers (ENGG 2420A), CUHK
2015,	summer	Tutor, Solidworks 3D Modeling, CUHK
2014,	fall	Tutor, Digital Circuits and Systems (ELEG2201), CUHK

Computer Skills

Programming Languages	C/C++, Python, MATLAB, Lua, HTML/CSS/JavaScript, Java
Deep Learning Frameworks	PyTorch, Torch, Caffe.
Software & OS	LaTeX, MS Office, Illustrator, Inkscape, Linux, Windows