

# Jinhua (Andy) MA

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## Working Experience

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- **Associate Professor** Aug 2017 to Now  
*School of Data and Computer Science, Guangzhou, China*
- **Post-Doctoral Fellow** Mar 2016 to Jul 2017  
*Department of Computer Science, Hong Kong Baptist University*
- **Post-Doctoral Fellow** Apr 2014 to Dec 2015  
*Department of Computer Science, Johns Hopkins University (QS Rankings Top 20)*
- **Post-Doctoral Fellow** Dec 2013 to Apr 2014  
*Department of Statistics and Biostatistics, Rutgers University*

## Education

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- **Hong Kong Baptist University** Sep 2009 to Aug 2013  
*Ph.D. in Computer Science*  
Advisor: [Prof. Pong Chi Yuen](#)
- **Sun Yat-Sen University** Sep 2007 to Jul 2009  
*M.Sc. in Mathematics*  
Advisors: [Prof. Pong Chi Yuen](#) and [Prof. Jian-Huang Lai](#)
- **Sun Yat-Sen University** Sep 2003 to Jul 2007  
*B.Sc. in Mathematics*

## Research Interests

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- **Machine Learning:** Classifier fusion, feature combination, manifold learning, transfer learning, semi-supervised learning, multi-label learning, matrix completion, time series analysis, large-scale learning, multiple instance learning
- **Computer Vision:** Human action recognition, person re-identification, tracking, face image analysis, object categorization, pose estimation, scene understanding
- **Medical applications:** Health care in intensive care units, liver disease classification and prediction

## Publications

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- **Journals**

1. Andy J Ma<sup>1</sup>, Nishi Rawat<sup>1</sup>, Austin Reiter, Christine Shrock, Alex Stone, Andong Zhan, Anahita Rabiee, Stephanie Griffin, Dale Needham and Suchi Saria, “Non-Invasive Sensor for Automatic Patient Mobility Measurement,” *Critical Care Medicine*, vol. 45, no. 4, pp. 630-636, 2017.
2. Terry CF Yip<sup>1</sup>, Andy J Ma<sup>1</sup>, Vincent WS Wong, YK Tse, Henry LY Chan, Pong-Chi Yuen, Grace LH Wong, “Non-Invasive Sensor for Automatic Patient Mobility Measurement,” *Alimentary Pharmacology & Therapeutics*, 2017.
3. Andy J Ma, Pong C Yuen, Jiawei Li and Ping Li, “Cross-Domain Person Re-

Identification Using Domain Adaptation Ranking SVMs,” *IEEE Transactions on Image Processing (TIP)*, vol. 24, no. 5, pp. 1599-1613, 2015.

4. Andy J Ma and Pong C Yuen, “Reduced Analytic Dependency Modeling: Robust Fusion for Visual Recognition,” *International Journal of Computer Vision (IJCV)*, vol. 109, no. 3, pp. 233-251, 2014.
5. Andy J Ma, Pong C Yuen, and Jian-Huang Lai, “Linear Dependency Modeling for Classifier Fusion and Feature Combination,” *IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)*, vol. 35, no. 5, pp. 1135–1148, 2013.
6. Andy J Ma, Pong C Yuen, Wilman W W Zou, and Jian-Huang Lai, “Supervised Spatio-Temporal Neighborhood Topology Learning for Action Recognition,” *IEEE Transactions on Circuits and Systems for Video Technology (TCSVT)*, vol. 23, no. 8, pp. 1447–1460, 2013.
7. Jiawei Li, Andy J Ma, and Pong C Yuen, “Semi-supervised Region Metric Learning for Person Re-identification,” *International Journal of Computer Vision (IJCV)*, 2018.
8. Baoyao Yang, Andy J Ma, and Pong C Yuen, “Learning Domain-Shared Group-Sparse Representation for Unsupervised Domain Adaptation,” *Pattern Recognition*, vol. 23, no. 8, pp. 1447-1460, 2018.
9. Xiangyuan Lan, Andy J Ma, Pong C Yuen and Rama Chellappa, “Joint Sparse Representation and Robust Feature-Level Fusion for Multi-Cue Visual Tracking,” *IEEE Transactions on Image Processing (TIP)*, 2015.

- **Conferences**

10. Andy J Ma, Pong C Yuen and Jiawei Li, “Domain Transfer Support Vector Ranking for Person Re-Identification without Target Camera Label Information,” *IEEE International Conference on Computer Vision (ICCV)*, 2013.
11. Andy J Ma and Pong C Yuen, “Reduced Analytical Dependency Modeling for Classifier Fusion,” *European Conference on Computer Vision (ECCV)*, 2012.
12. Andy J Ma and Pong C Yuen, “Linear Dependency Modeling for Feature Fusion,” *IEEE International Conference on Computer Vision (ICCV)*, 2011.
13. Andy J Ma and Ping Li, “Semi-Supervised Ranking for Re-Identification with Few Labeled Image Pairs,” *Asian Conference on Computer Vision (ACCV)*, 2014.
14. Andy J Ma and Ping Li, “Query Based Adaptive Re-Ranking for Person Re-Identification,” *Asian Conference on Computer Vision (ACCV)*, 2014.
15. Andy J Ma, Pong C Yuen, Wilman W W Zou, and Jian-Huang Lai, “Supervised Neighborhood Topology Learning for Human Action Recognition,” *Workshops of IEEE International Conference on Computer Vision (ICCV Workshops)*, 2009.
16. Baoyao Yang, Andy J Ma, and Pong C Yuen, “Domain-Shared Group-Sparse Dictionary Learning for Unsupervised Domain Adaptation,” *AAAI Conference on Artificial Intelligence*, 2018.
17. Mang Ye, Andy J Ma, Liang Zheng, Jiawei Li, and Pong C Yuen, “Dynamic label graph matching for unsupervised video re-identification,” *IEEE International Conference on Computer Vision (ICCV)*, 2017.
18. Austin Reiter, Andy J Ma, Nishi Rawat, Christine Shrock and Suchi Saria, “Process Monitoring In The Intensive Care Unit: Assessing Patient Mobility Through Activity Analysis With A Non-Invasive Mobility Sensor,” *International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI)*, 2016.

19. Xiangyuan Lan, Andy J Ma and Pong C Yuen, “Multi-Cue Visual Tracking Using Robust Feature-Level Fusion Based on Joint Sparse Representation,” *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2014.

## Academic Services

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- Associate Editor:  
*Journal of Electronic Imaging*
- Reviewer:  
*IEEE Transactions on Image Processing, IEEE Transactions on Cybernetics, IEEE Transactions on Information Forensics and Security, Pattern Recognition, IEEE Transactions on Human-Machine Systems, Sensors, Optical Engineering*
- Research Event  
*Organizing Committee, Winter School on Biometrics, January 9-13, 2017, Hong Kong Baptist University, Hong Kong*

## Invited Talks

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- Topic: Non-Invasive Sensor for Automatic Patient Mobility Measurement  
17th Annual ACCM Research Day, Johns Hopkins Hospital Dec 2015
- Topic: Feasibility of a Non-Invasive Sensor for Measuring ICU Patient Mobility  
SCCM’s 44th Critical Care Congress, Phoenix, AZ, US Feb 2015
- Topic: Dependency Modeling for Information Fusion with Applications in Visual Recognition  
ICTS regular meeting, Hong Kong Baptist University Apr 2013
- Topic: Supervised Neighborhood Topology Learning for Human Action Recognition  
Symposium on Vision and Graphics, Guangzhou, Guangdong, China Nov 2009

## Technical Skills

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- Programming Skills: Matlab (Proficient), VC++ & C (Advanced), Java (Elementary)
- Strong background in Mathematics

## Awards

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- Research Postgraduate Scholarship, Hong Kong Baptist University 2011-2012
- Teaching Assistant Performance Award, Hong Kong Baptist University 2010-2011
- Graduate Student Scholarship, Sun Yat-Sen University 2007-2009
- Excellent Student Scholarship, Sun Yat-Sen University 2003-2006

## Teaching Experiences

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- Data Mining, Matrix Analysis

## Languages

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- English (Advanced), Mandarin (Fluent), Cantonese (Native)