# Changyou Chen

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#### Education

2010-now PhD candidate in College of Engineering and Computer Science, the Australian University, Canberra, Australia. Sep 2010–February 2014 (expected).

2007–2010 MS in School of Computer Science, Fudan University, Shanghai, China. Sep 2007–Jun 2010.

2003–2007 **BS in School of Computer Science**, Fudan University, Shanghai, China. Sep 2007-Jun 2010.

#### Research Interests

• Bayesian Nonparametrics

Dependent Normalized Random Measures; Dependent Poisson-Kingman Processes; Some topics on Diffusion Processes; MCMC for Hierarchical Poisson-Dirichlet Processes, etc.

- Text Mining & Topic Models
- Manifold Learning, Metric Learning, Biometrics Identification, etc.

## Research and Project Experience

## 2010-now ANU & NICTA.

- Working on non-parametric Bayesian methods and topic models, supervised by Wray Buntine and collaborate with many others.
- Work on Dependent Normalized Random Measures (ICML'13), Dynamic Topic Models (ICML'12), Differential Topic Models (submitted), MCMC for Hierarchical Poisson-Dirichlet Processes (ECML'11).

2009 Microsoft Research Asia (MSRA), Mar 2009–Apr 2009.

• Intern. Worked at the Media Communication Group (mCom).

2007-2010 Shanghai Key Lab of Intelligent Information Processing (IIPL), Sep 2007-Jun 2010.

• Worked on Manifold Learning and Gait Recognition.

### Selective Publications

 [1] Changyou Chen, Vinayak Rao, YeeWhye Teh, Wray Buntine. Dependent Normalized Random Measures.

 International Conference on Machine Learning (accepted), 2013. [2] Changyou Chen, Nan Ding, Lan Du, Wray Buntine. Differential Topic Models. submitted, 2012.

[3] Changyou Chen, Nan Ding, Wray Buntine.

Dependent Hierarchical Normalized Random Measures for Dynamic Topic Modeling.

International Conference on Machine Learning, 2012.

- [4] Changyou Chen, Wray Buntine, Nan Ding. Theory of Dependent Hierarchical Normalized Random Measures. Technical Report arXiv:1205.4159, NICTA and ANU, 2012.
- [5] Lan Du, Wray Buntine, Huidong Jin, Changyou Chen.
  Sequential Latent Dirichlet Allocation.
  Knowledge and Inforamtion Systems, vol. 31, no. 3, pp. 475–503, 2012.
- [6] Changyou Chen, Lan Du, Wray Buntine. Sampling Table Configurations for the Hierarchical Poisson-Dirichlet Process. The European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML-PKDD), 2011.
- [7] Changyou Chen, Junping Zhang, Xuefang He, Zhi-hua Zhou.
  Efficient Non-Parametric Kernel Learning with Arbitrary Number of Pairwise Constraints.
  International Journal of Machine Learning and Cybernetics, 2011.
- [8] Junping Zhang, Jian Pu, Changyou Chen, Rudolf Fleischer.
  Low Resolution Gait Recognition.
  IEEE Transaction on System, Man, Cybernetic, Part B, 2009.
- [9] Changyou Chen, Junping Zhang, Rudolf Fleischer. Distance Approximating Dimension Reduction of Riemannian Manifolds. IEEE Transaction on System, Man, Cybernetic, Part B, 2009.
- [10] Changyou Chen, Junping Zhang, Rudolf Fleischer. Multilinear Tensor-based Nonparametric Dimension Reduction. The 3rd IAPR/IEEE International Conference on Biometrics (ICB 2009).
- [11] Junping Zhang, Yuan Cheng, Changyou Chen. Low Resolution Gait Recognition with High Frequency Super Resolution. The Tenth Pacific Rim International Conference on Artificial Intelligence (PRI-CAI 08).
- [12] Changyou Chen, Junping Zhang. An Iterative Gait Prototype Learning Algorithm based on Tangent Distance(in Chinese). Journal of Computer Research and Development, 2008.

#### **Awards**

- 2012 ICML student travel scholarship award.
- 2009 IBM Outstanding Students Scholarship (1 out of 2 students).
- 2008 Morgan Stanley Scholarship (among about 5 students).
- 2007-2010 First class prize of Academic Scholarship at Fudan University (rank 2 and 3 out of more than 100 students), 3 times.
- 2003-2007 Third class prize of Renmin Scholarship at Fudan University, 3 times.

#### Academic Activities

- 2012.11 Volunteer of Asian Conference on Machine Learning (ACML) in Singapore.
- 2012.6 Visited YeeWhye Teh at University College London.
- 2012.6 Visited Zoubin Ghahramani at Cambridge University.
- 2012.6 Attended International Conference on Machine Learning (ICML) in Edinburgh UK.
- 2011.12 Attended Neural Information Processing System conference (NIPS) in Granada Spain.
- 2011.9 Attended European Conference on Machine Learning (ECML-PKDD) in Athens Greece.
- 2011.6 Attended Machine Learning Summer School in Singapore.
- 2010.9 Attended Machine Learning Summer School in Canberra Australia.

#### Conference Reviewer

IJCAI'13, ICML'12, IJCAI'11, KDD'11.

#### Journal Reviewer

**ELSEVIER Signal Processing** 

ACM Transactions on Intelligent Systems and Technology (TIST)

Transactions on Intelligent Transportation Systems (TITS)

IEEE Intelligent Systems (IS)

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# Teaching Experiences

- 2013 Tutor for undergraduate course "Advance Databases and Data Mining" at ANU.
- 2012 Tutor for undergraduate course "Advance Databases and Data Mining" at ANU.
- 2008 Teaching assistant for undergraduate course "College Physics" at Fudan University.