# Fanchi Meng

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#### **Education**

2014 - present	PhD student in Software Engineering & Intelligent Systems Department of Electrical and Computer Engineering University of Alberta Edmonton, Alberta, Canada
2010 - 2013	Master in Computer Application Technology College of Information Engineering Northwest A&F University <sup>1</sup> Yangling, Shaanxi, China
2006 - 2010	Bachelor in Computer Science and Technology College of Information Engineering Northwest A&F University Yangling, Shaanxi, China

# **Working Experience**

January 2014 - present	Research assistant Department of Electrical and Computer Engineering University of Alberta
September 2010 – June 2012	Teaching assistant College of Information Engineering Northwest A&F University

# Research

• Computational Predictive Models

Applications of machine learning-based predictive models in proteomics and genomics

• Knowledge Discovery and Data Mining

High-throughput analysis of intrinsic disorder in proteins

# **Peer-reviewed Journal Publications**

 Meng, F. and Kurgan, L., DFLpred: High throughput prediction of disordered flexible linker regions in protein sequences. Bioinformatics (proceedings of ISMB'16), 2016. 32(12): p. i341-i350

<sup>1</sup> Northwest A&F University, A&F referring to Agriculture and Forestry, is a key national comprehensive university supported by "Project 985" and "Project 211".

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- 2. Na, I., **Meng**, F., Kurgan, L. and Uversky, V.N., *Autophagy-related intrinsically disordered proteins in intra-nuclear compartments*. Molecular BioSystems, 2016. **12**(9): 2798-2817
- 3. **Meng**, F., Na, I., Kurgan, L. and Uversky, V.N.., *Compartmentalization and Functionality of Nuclear Disorder: Intrinsic Disorder and Protein-Protein Interactions in Intra-Nuclear Compartments*. International Journal of Molecular Sciences, 2015. **17**(1): article 24
- 4. **Meng**, F., et al., *Unstructural biology of the dengue virus proteins*. FEBS Journal, 2015. **282**(17): p. 3368-3394.
- 5. **Meng**, F., Cai, C. and Yan, H., *A Bicluster-Based Bayesian Principal Component Analysis Method for Microarray Missing Value Estimation*. IEEE Journal of Biomedical and Health Informatics, 2014. **18**(3): p. 863-871.
- 6. **Meng**, F. and Cai, C., *Microarray missing value estimation by local Bayesian principal component analysis*. ICIC Express Letters, 2013. 7(1-6): p. 535-539.
- 7. Cai, C. and **Meng**, F., *Gene missing value imputation by matrix completion and local least square*. ICIC Express Letters, 2012. **6**(5): p. 1229-1234.
- 8. **Meng**, F., Li, S. and Cai, C., *Microarray missing value estimation based on convex nuclear norm optimization, Computer Engineering and Design*, 2013. **34**(2): p. 660-668 [in Chinese].

#### **Peer-reviewed Conference Publications**

1. **Meng**, F., Cai, C. and Li, S., *Performance evaluation of L1-norm-based microarray missing value imputation*. 2<sup>nd</sup> IEEE International Conference on Signal Processing, Communications and Computing (ICSPCC 2012), Hong Kong, 2012.

## **Presentations**

- Meng, F., DFLpred: High-throughput prediction of disordered flexible linker regions in protein sequences. 24<sup>rd</sup> Annual International Conference on Intelligent Systems for Molecular Biology (ISMB 2016), Orlando, USA, 2016.
- 2. **Meng**, F., *Microarray Missing Value Estimation by Local Bayesian Principal Component Analysis*. 7<sup>th</sup> International Conference on Innovative Computing, Information and Control, Shanghai, China, 2012.

## **Publications under revision**

## **Peer-reviewed Book Chapters**

1. **Meng**, F. and Kurgan L., *Computational prediction of protein secondary structure from sequence*. Current Protocols in Protein Science, Wiley, revision submitted, 2016.

## **Awards**

- 1. Travel Fellowship awarded by International Society for Computational Biology for presenting at ISMB 2016: 2016
- 2. Travel Award issued by Faculty of Graduate Studies and Research of University of Alberta for presenting at ISMB 2016: 2016

- 3. National Graduate Scholarship awarded by the Ministry of Education of The People's Republic of China: 2013
- 4. First-class scholarship for outstanding graduate students at the Northwest A&F University: 2010-2012
- 5. Second-class scholarship for outstanding undergraduate students at the Northwest A&F University: 2007-2009

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