

Jiajie Peng

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RESEARCH INTERESTS	Bioinformatics, data mining, data-driven ontology construction, gene ontology based semantic similarity, biological network reconstruction	
EDUCATION	Harbin Institute of Technology (HIT) , Harbin, China Ph.D., Computer Science and Technology Advisor: Yadong Wang	Aug. 2010 - now
	Michigan State University (MSU) , East Lansing, MI, USA Visiting Scholar, MSU-DOE Plant Research Laboratory Mentor: Jin Chen	Sep. 2010 - Sep. 2012
	Harbin Institute of Technology (HIT) , Harbin, China M.Phil., Computer Science and Technology B.Sc., Computer Science and Technology	Aug. 2008 - Jul. 2010 Aug. 2004 - Jul. 2008

PUBLICATIONS

- **Peng J**, Li H, Wang Y and Chen J, *A web tool for measuring gene semantic similarities by combining Gene Ontology and gene co-function networks*, proceedings of the 6th ACM Conference on Bioinformatics, Computational Biology (ACM BCB15), 2015, in press.
- **Peng J**, Li H, Liu Y, Juan L, Jiang Q, Wang Y and Chen J, *InteGO2: a Web Tool for Measuring and Visualizing Gene Semantic Similarities using Gene Ontology*, BMC Genomics, 2015, in press
- **Peng J**, Wang T, Hu J, Wang Y and Chen J, *Constructing organelle association network in Arabidopsis thaliana*, Current Genomics, 2015, in press.
- Liu Y, Liu J, Lu J, **Peng J**, Juan L, Zhu X, Li B and Wang Y, *Joint detection of copy number variations in parent-offspring trios*, Bioinformatics, 2015, in press.
- **Peng J**, Uygun S, Kim T, Wang Y, Rhee SY and Chen J, *Measuring semantic similarities by combining gene ontology annotations and gene co-function networks*, BMC Bioinformatics, 2015, 16:44.
- Jiang Q, Ma R, Wang J, Wu X, Jin S, **Peng J**, Tan R, Zhang T, Li Y and Wang Y, *LncRNA2Function: a comprehensive resource for functional investigation of human lncRNAs based on RNA-seq data*, BMC genomics, 2015, 16:S2.
- Jiang Q, Wang J, Wu X, Ma R, Jin S, Han Z, Tan R, **Peng J**, Liu G, Li Y and Wang Y, *LncRNA2Target: a database for differentially expressed genes after lncRNA knockdown or overexpression*, Nucleic Acids Res, 2015, 43:D193-D196.
- **Peng J**, Wang Y, and Chen J, *Towards integrative gene functional similarity measurement*, BMC Bioinformatics, 2014, 15:S5.
- Cheng L, Li J, Ju P, **Peng J** and Wang Y, *SemFunSim: A New Method for Measuring Disease Similarity by Integrating Semantic and Gene Functional Association*, PLoS ONE, 2014, 9:e99415.
- **Peng J**, Li H, Jiang Q, Wang Y and Chen J, *An Integrative Approach for Measuring Semantic Similarities using Gene Ontology*, BMC Systems Biology, 2014, 8:S8.
- Jin S, Tan R, Jiang Q, Xu L, **Peng J**, Wang Yo and Wang Y, *A Generalized Topological Entropy for Analyzing the Complexity of DNA Sequences*, PLoS ONE, 2014, 9:e88519.

- **Peng J**, Chen J and Wang Y, *Identifying cross-category relations in gene ontology and constructing genome-specific term association networks*, BMC Bioinformatics, 2013, 14:S15.
- **Peng J**, Wang T, Wang Y and Chen J, *Extending Gene Ontology with Gene Network Data*, Bioinformatics, Major Revision.

RESEARCH

PROFESSIONAL SKILLS **General:** Data mining for Bioinformatics, multi-omics data analysis, fast modeling and prototyping, familiar with network construction and analysis, familiar with ontology based data analysis

Programming: Java, C/C++, R, Unix/Linux shell scripting, Python

TEACHING EXPERIENCE **Teaching Assistant** at School of Computer Science and Technology, HIT

Graduate course "Knowledge Engineering" Spring 2014, 2015
Undergraduate course "Introduction to bioinformatics" Spring 2014

MENTORSHIP Qinghua Jiang, Associate Professor, Harbin Institute of Technology Spring 2013 - Present
Liang Cheng, Assistant Professor, Harbin Medical University Spring 2013 - Present
Yongzhuang Liu, PhD, Harbin Institute of Technology Spring 2014 - Present

HONORS AND AWARDS China Scholarship Council Scholarship for Postgraduate Student 2010
National Scholarship for Postgraduate Student (top 1%) 2013
Guanghua Scholarship for Postgraduate Student (top 1%) 2014

REFEREES

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