# Yongnan Zhu

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Motto: Done is better than to be perfect!

Chinese Motto: 努力不一定有所收获,不努力一定一无所获

Research: My research focus on interactive biological data visualization and I am specially

interested in interactive data visualization (2D or 3D) and analysis on the Web.

## **Education**

(Visiting scholar: Research assistant).2014-current, Computer Science and Electrical Engineering department, University of Maryland Baltimore County(UMBC), Baltimore, MD,USA
 MS Thesis title: PathBubbles: An interactive visualization system of biological pathways Advisor: Jinglong Fang, Zhigeng Pan, JianChen

- MS.2012-2014, Computer Science and Technology, Hangzhou Dianzi University (HDU), Hangzhou, China
- BS.2008-2012, School of Economics and Management, Inner Mongolia University of Science and Technology (IMUST), Baotou, China

**BS** Thesis title: Design and Realization of Property Manage System (PMS)

Advisor: Yan Han

#### **Awards**

- Third-class Scholarship (Top 15%), IMUST, 2009 Spring
- First-class Scholarship (Top 5%), IMUST, 2009 Fall, 2010 Spring and Fall, 2011 Spring and Fall
- Outstanding Student Award (Top 3%), IMUST, 2010 Fall
- Outstanding Undergraduate Thesis (TOP 10%), IMUST, 2012

#### **Project**

- WebGIVI: an visualization tool for analyzing eGIFT Gene Enrichment:
  <a href="http://raven.anr.udel.edu/~sunliang/webgivi\_github/index.php">http://raven.anr.udel.edu/~sunliang/webgivi\_github/index.php</a> [Javascript; WebGL; D3.js]
- PathRings: an web-based tool for Exploration of Ortholog and Expression Data in Biological Pathways: <a href="http://raven.anr.udel.edu/~sunliang/ivcl/PathRings/">http://raven.anr.udel.edu/~sunliang/ivcl/PathRings/</a> [Javascript; WebGL; D3.js]
- A semi-automatic way to generate biological layout Using Crowdsourcing: http://www.csee.umbc.edu/~yongnan/drawPathway/; [Javascript; WebGL;]
- Sketch brain fiber tracts study: <a href="http://davincilab.github.io/">http://davincilab.github.io/</a>; [Javascript, WebGL, Three.js]
- VisBubbles: an visualization framework for bat analysis: <a href="http://v.youku.com/v\_show/id\_XNzgxNzcyMTky.html">http://v.youku.com/v\_show/id\_XNzgxNzcyMTky.html</a>;[QT; C++;OpenGL]
- Github Link: <a href="https://github.com/younyzhu">https://github.com/younyzhu</a>; <a href="https://github.com/younyzhu">https://github.com/younyzhu</a>; <a href="https://github.com/younyzhu">https://github.com/younyzhu</a>;

### **Publication**

- [1] Jian Chen, Judith E. Terill, Henan Zhao, Guohao Zhang, Keqin Wu, Alexander Garbrino, Yongnan Zhu. Interactive Visual Computing Laboratory Research[J].
- [2] Yongnan Zhu, Liang Sun, Carl Schmidt, Keqin Wu, Zhigeng Pan, Jinglong Fang, J. C. (n.d.). *PathRings: an web-based tool for Exploration of Ortholog and Expression Data in Biological Pathways*[J] (submit to Bioinfomatics).
- [3] (In preparation should be done in about a month) Chen, Jian, Bragdon, Andrew, C., Li, Guangxia, Zhu, Yongnan, Pan, Zhigeng, Swartz, Sharon, M., MotionTrail: An Exploratory Visualization Environment for Bat Flight Motion Data Analysis[J], Visual Computing.
- [4] (In preparation should be done in about three weeks) Wu, Keqin, Sun, Liang, Zhu, Yongnan, Schmidt, Carl, and Chen, Jian, PathBubbles: A Dynamic, Scalable, and Synchronous Visualization Environment for Pathway Analysis[J], IEEE Transactions on Visualization and Computer Graphics.
- [5] (In preparation should be done in about three months) Jian Chen, Yongnan Zhu, Alexander P. Auchs, A Review of Diffusion Tensor MRI Visualization Approaches: A semiotic Perspective[J], IEEE Transactions on Visualization and Computer Graphics.
- [6] (In preparation should be done in about three weeks) Xu, Yanning, Auchus, Alexander P., Correia, Stephen, Yongnan Zhu, Chen, Jian, Perceptually Motivated Global Illumination by Multi-type Light Sources for Dense Streamribbon Visualization, IEEE Transactions on Visualization and Computer Graphics.

Update: 12/30/2014