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RESEARCH INTERESTS

Developing methods and tools for visual analytics – an integrated approach combining visualization, human factors and data analysis to derive insight from massive, dynamic, and ambiguous data.

EDUCATION

2010- 2014: Phd in Computer Science, University of Illinois at Chicago, IL

2008-2009: M.Sc. in Computer Science, University of Illinois at Chicago, IL

2006-2008: M.Sc. in Computer Engineering, Politecnico di Milano, Italy

2001-2006: B.Sc. (with honor) in Computer Science, Ho Chi Minh City University of Technology, Vietnam

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WORK EXPERIENCE:

August 2016 – Present

Assistant professor at Texas Tech University, Lubbock, TX

August 2014 – July 2016

Postdoctoral researcher in biological network visualization at UIC Electronic Visualization Lab

September 2015 – June 2016

Consultant in network visualization for Objectivity Inc, San Jose, CA.

July 2014 – January 2015

Consultant in data visualization for Skytree - The Machine Learning Company.

August 2011 – July 2014

Research assistant in the Computer Science Department at University of Illinois at Chicago, IL

May 2011 – August 2011

Research assistant in the Learning Science Department at University of Illinois at Chicago, IL

January 2009 – May 2011

Research assistant in the National Center for Data Mining at University of Illinois at Chicago, IL

June 2005 - August 2005

Engineering Internship at Paragon Solutions Vietnam, Ho Chi Minh City, Vietnam.

PUBLICATIONS:

[W2] **Tuan Dang**, Hong Cui, and Angus Forbes. *MultiLayerMatrix: Visualizing Large Taxonomic Datasets*. The seventh international EuroVis workshop on Visual Analytics, EuroVA 2016.

[C11] **Tuan Dang**, Nick Pendar, and Angus Forbes. *TimeArcs: Visualizing Fluctuations in Dynamic Networks*. Proceedings of EG/VGTC Conference on Visualization, EuroVis 2016. (Acceptance rate of 27%)

[W1] **Tuan Dang**, Nico Franz, Bertram Ludäscher and Angus Forbes. *ProvenanceMatrix: A Visualization Tool for Multi-Taxonomy Alignments*. International Workshop on Visualizations and User Interfaces for

Ontologies and Linked Data, VOILA 2015. (Acceptance rate of 28%)

[C10] **Tuan Dang,** Paul Murray, Jillian Aurisano, and Angus Forbes. *ReactionFlow: An Interactive Visualization Tool for Causality Analysis in Biological Pathways*. Proceedings of the 5th Symposium on Biological Data Visualization, BioVis 2015.

[C9] **Tuan Dang**, Paul Murray, and Angus Forbes. *PathwayMatrix: Visualizing Binary Relationships between Proteins in Biological Pathways*. Proceedings of the 5th Symposium on Biological Data Visualization, BioVis 2015.

[J4] **Tuan Dang** and Leland Wilkinson. *Transforming Scagnostics to Reveal Hidden Features*. IEEE Transactions on Visualization and Computer Graphics 20(12), VAST 2014. (Acceptance rate of 23%)

[C8] **Tuan Dang** and Leland Wilkinson. *PixSearcher: Searching Similar Images in Large Image Collections through Pixel Descriptors*. Proceedings of the 10th International Symposium on Visual Computing, ISVC 2014.

[C7] **Tuan Dang** and Leland Wilkinson. *ScagExplorer: Exploring Scatterplots by Their Scagnostics*. Proceedings of the 7th IEEE Pacific Visualization Symposium, PacificVis 2014. (Acceptance rate of 29%)

[C6] **Tuan Dang** and Leland Wilkinson. *TimeExplorer: Similarity Search Time Series by Their Signatures*. Proceedings of the 9th International Symposium on Visual Computing, ISVC 2013.

[J3] **Tuan Dang,** Anushka Anand, and Leland Wilkinson: *TimeSeer: Scagnostics for High-Dimensional Time Series*. IEEE Transactions on Visualization and Computer Graphics 19(13), TVCG 2013.

[C5] **Tuan Dang** and Leland Wilkinson. *Timeseer: detecting interesting distributions in multiple time series data*. Proceedings of the 5th International Symposium on Visual Information Communication and Interaction, VINCI 2012.

[C4] **Tuan Dang**, Anushka Anand, and Leland Wilkinson. *FmFinder: Search and Filter Your Favorite Songs*. Proceedings of the 8th International Symposium on Visual Computing, ISVC 2012.

[C3] Anushka Anand, Leland Wilkinson, and **Tuan Dang**. *Visual Pattern Discovery using Random Projections*. Proceedings of IEEE Conference on Visual Analytics Science and Technology, VAST 2012. (Acceptance rate of 28%)

[J2] Leland Wilkinson, Anushka Anand, and **Tuan Dang**. *Substantial improvements in the set-covering projection classifier CHIRP*. ACM TKDD 2012.

[C2] Leland Wilkinson, Anushka Anand, and **Tuan Dang**. *CHIRP: A New Classifier based on Composite Hypercubes on Iterated Random Projections*. ACM KDD 2011. (Acceptance rate of 17.5%)

[J1] **Tuan Dang,** Leland Wilkinson, and Anushka Anand. *Stacking Graphic Elements to Avoid Over-Plotting*. IEEE Transactions on Visualization and Computer Graphics 16(6), InfoVis 2010. (Acceptance rate of 26%)

[C1] Anushka Anand, Leland Wilkinson, and **Tuan Dang**. *An L∞ Norm Visual Classier*. Proceedings of IEEE International Conference on Data Mining, ICDM 2009. (Acceptance rate of 17.8%)

INVITED TALKS:

2017: *Visualizing Biological Pathways through Multiple Layers of Abstraction*. Bio-IT World Conference & Expo. Cambridge Healthtech Institute in Boston, MA
2016: *Data visualization and visual analytics*. TTU Computer Science departmental seminars.
2015: *Feature-based Visual Analysis*. Chicago Chapter ACM. Chicago, IL.
2014: *Feature-based Visual Analysis*. Skytree tech talk, 2014. San Jose, CA
2013: *Interactive Visual Analysis of Images*. Doctoral Colloquium, IEEE VisWeek. Atlanta, GA.

ACTIVITIES:

2016: Graduate Program Committee (Department Service).

2016: Website chair of the 6th Symposium on Biological Data Visualization (BioVis 2016).
2015: Website chair of the 5th Symposium on Biological Data Visualization (BioVis 2015).

2016: Reviewer for IEEE Symposium on Information Visualization (InfoVis 2016).
2016: Reviewer for IEEE Conference on Visual Analytics Science and Technology (VAST 2016).
2016: Reviewer for IEEE Scientific Visualization Conference (SciVis 2016).
2015: Reviewer for EG/VGTC Conference on Visualization (EuroVis 2016).
2015: Reviewer for IEEE Pacific Visualization (PacificVis 2016).
2015: Reviewer for IEEE Symposium on Information Visualization (InfoVis 2015).

COMPUTER SKILLS:

Programming: Javascript and D3, Java, Processing, VTK, J2EE
Visualization Softwares: Tableau, Xmdv, ParaView
Database: MongoDB, Oracle 9i, MySQL
Operating Systems: Mac, Windows, Linux

REFERENCES:

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Palo Alto, CA 94306
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WWW: https://www.cs.uic.edu/~wilkinson/

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