JUN WANG

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Education

Stony Brook University, Stony Brook, NY
Ph.D. in Computer Science Anticipated 2018

Shandong University, Jinan, China
Master of Engineering in Computer Science June 2013

Shandong University, Jinan, China
Bachelor of Engineering in Software Engineering June 2009

Experience

Graduate Research Assistant, Stony Brook University, Stony Brook, NY June 2014-Present

- Design and develop visual analytic system for causality analysis.
- Devise new algorithms to handle different data types in causal inference process.
- Data mining on large-scale high-dimensional datasets with parallel algorithms on GPU.
- Collaborate with domain scientists on data analysis projects.
- Publish and present research papers in peer-reviewed journals and conferences.

Research Intern, VISA Research, Foster City, CA May 2016-August 2016

- Designed and developed the visual interface of a deep learning visual analytic system.
- Data mining on transaction data with deep learning techniques.

Teaching Assistant, Stony Brook University, Stony Brook, NY August 2013-June 2014

- Supported professors with teaching several undergraduate computer science courses.

Graduate Research Assistant, Shandong University, Jinan, China August 2010-June 2013

- Devised a new method for parameterizing motion of objects in visual tracking tasks.

Recent Projects

The Visual Causality Analyst Software

- Visual analytic system for analyzing causal dependencies between variables in observational datasets.
- Interactive visual interface for observing and exploring different causal models embedded in data.

The Spectra Miner Software

- Mining data hierarchical relations embedded in large scale and high-dimensional data.
- High performance algorithms with GPU parallelization and visualization.

Languages

- Frequently working with Python, JavaScript, R, C\C++; Have experience in C#, Java, and Matlab.

Refereed Publications

Journal Papers

[1] **J. Wang**, A. Zelenyuk, D. Imre, and K. Mueller, "Big Data Management with Incremental K-Means Trees–GPU-Accelerated Construction and Visualization," *Informatics*, vol. 4, no. 3, pp. 24, 2017

[2] **J. Wang** and K. Muller, "The Visual Causality Analyst: An Interactive Interface for Causal Reasoning," *IEEE Transaction on Visualization and Computer Graphics (VAST15)*, vol. 22, no. 1, pp. 230-239, 2016.

[3] A. Zelenyuk, D. Imre, J. Wilson, Z. Zhang, **J. Wang**, and K. Mueller, "Airborne Single Particle Mass Spectrometers (SPLAT II & miniSPLAT) and New Software for Data Visualization and Analysis in a Geo-Spatial Context," *Journal of The American Society for Mass Spectrometry*, vol. 26, no. 2, pp. 257-270, 2015

Conference Papers

[1] **J. Wang** and K. Muller, "Visual Causality Analysis Made Practical," in *IEEE Proc. Visual Analytics Science and Technology (VAST17)*, Phoenix, AZ, Oct. 2017.

[2] **J. Wang**, E. Papenhausen, B. Wang, S. Ha, A. Zelenyuk, and K. Mueller, "Progressive Clustering of Big Data with GPU Acceleration and Visualization," in *IEEE Proc. New York Scientific Data Summit (NYSDS17)*, New York, Aug. 2017

[3] **J. Wang**, F. Zhong, G. Wang, Q. Peng, and X. Qin, "Visual Tracking via Subspace Motion Model," in *British Machine Vision Conference*, Bristol, UK, Sept. 2013.

Workshop Papers

[1] **J. Wan**g, "Visual Causality Analysis", in *IEEE VIS Doctoral Colloquium*, Phoenix, AZ, Oct. 2017.