JUN WANG

PhD Student, Computer Science

Research Assistant, VAI Lab

Department of Computer Science Email: junwang2@cs.stonybrookedu

Stony Brook University, Stony Brook, NY 11794-2424

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

- Designed and developed visual interfaces 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.
- 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

http://junwang23.github.io

- 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 SpectraMiner 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.

Referred Publications

- **J. Wang** and K. Muller, "Visual Causality Analysis Made Practical," (to appear) in *IEEE conference* on Visual Analytics Science and Technology (VAST), Pheonix, AZ, Oct. 2017.
- **J. Wang**, "Visual Causality Analysis", (to appear) in *IEEE VIS Doctoral Colloquium*, Pheonix, AZ, Oct. 2017.
- **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
- **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 (NYSDS)*, New York, Aug. 2017
- **J. Wang** and K. Muller, "The Visual Causality Analyst: An Interactive Interface for Causal Reasoning," *IEEE Transaction on Visualization and Computer Graphics*, vol. 22, no. 1, pp. 230-239, 2016.
- **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.