KEWEN WANG

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http://wangkewen.github.io

EDUCATION

University of Connecticut	*2014 -2019*
Ph.D. in Computer Science, GPA: 4.0	
Georgia State University	*2013 -2014*
Ph.D. in Computer Science, GPA: 3.8	
Beihang University	*2010 -2013*
M.S. in Computer Science, GPA: 3.3	
Beijing Information Science and Technology University	*2005 -2009*
B.S. in Computer Science, GPA: 3.5	

TECHNICAL SKILLS

Computer Languages	Java, Linux Shell, C, Python
Open Source	Apache Spark, Apache Hadoop, Xen, Apache Tomcat, BTrace, Ganglia
Web Development	JSP, Ajax, CSS, JavaScript, jQuery

CODING COMPETITION

Google Code Jam 2017 Qualification Round Rank#1483/25k, Round 1C Rank#1664/3775

ACADEMIC SERVICE

Reviewer of IEEE Transactions on Parallel and Distributed Systems (TPDS).
Reviewer of ACM Transactions on Architecture and Code Optimization (TACO).

RESEARCH EXPERIENCE

Interference Modeling of Apache Spark Jobs　　　　　　　　Aug 2015 - Nov 2016
Research Assistant　　　　　　　　　　　　　　　　　　*University of Connecticut*

· Collect resources usage information (Dstat) for Apache Spark Jobs running in Xen virtual machines.
· Build an inference model to predict the execution time of multiple Spark jobs executed in parallel.
· Schedule Spark jobs submitted at different time to optimize the total execution time.

Performance Prediction for Apache Spark Jobs　　　　　　　Oct 2014 - May 2015
Research Assistant　　　　　　　　　　　　　　　　　　*University of Connecticut*

· Analyze execution logs of Apache Spark jobs running in cluster of 13 nodes.
· Establish an analytical performance model to predict CPU, I/O and memory cost for Spark jobs.

Learning environment for Smart Grid security　　　　　　　Aug 2013 - Feb 2014
Research Assistant　　　　　　　　　　　　　　　　　　　*Georgia State University*

· Design and implement a website for user management to access Smart Grid emulator for courses design.

Optimizing Hadoop MapReduce　　　　　　　　　　　　　Nov 2011 - Dec 2012
Research Assistant　　　　　　　　　　　　　　　　　　　　*Beihang University*

· Apply BTrace to collect Hadoop MapReduce job profile, monitor resources consumption using Ganglia.
· Construct Hadoop performance model for execution time prediction.
· Design heuristic search algorithm to find optimal configuration for MapReduce job.

WORK EXPERIENCE

Full Stack Developer   Nov 2011 - Jan 2012
Science and Technology Research Institute of Beihang University

· Build website on the framework Struts+Spring+Hibernate, and load project archives into MySQL.
· Implement information retrieval and display using JSP, JavaScript and Ajax.

Research Intern   Mar 2010 - May 2010
NDtech Inc. Beijing, China

· Analyze ANTLR (ANother Tool for Language Recognition).
· Participate in the research of Script#, and apply Script# to write JavaScript using C#.

Test Engineering Intern   Oct 2008 - Nov 2008
National Computer Products Quality Supervising Test Center, Beijing, China

· Apply black-box testing to test an information management software.

AWARDS

Predoctoral Fellowship   *2017*
Computer Science and Engineering department at University of Connecticut
Third Class Scholarship   *2011*
Beihang University
Academic Scholarship   *2008*
Beijing Information Science and Technology University
Municipal 2nd Prize of 21st National Middle School Students Physics Competition   *2004*
City of Xianning, China

PUBLICATIONS

1. Modeling Interference for Apache Spark Jobs. Wang, Kewen, Mohammad Maifi Hasan Khan, Nhan Nguyen, and Swapna Gokhale. IEEE 9th International Conference on Cloud Computing (CLOUD), 2016.

2. CSMiner: An Automated Tool for Analyzing Changes in Configuration Settings across Multiple Versions of Large Scale Cloud Software. Nguyen, Nhan, Mohammad Maifi Hasan Khan, and Kewen Wang. IEEE 9th International Conference on Cloud Computing (CLOUD), 2016.

3. Performance Prediction for Apache spark Platform. Wang, Kewen, Mohammad Maifi Hasan Khan. IEEE 17th International Conference on High Performance and Communications (HPCC), 2015.

4. Integrated Learning Environment for Smart Grid Security. Wang, Kewen, Yi Pan, Wen-Zhan Song, Weichao Wang, and Le Xie. The Fourth International Conference on Advanced Communications and Computation (INFOCOMP), 2014.

5. PredatorAn experience guided configuration optimizer for Hadoop MapReduce. Wang, Kewen, Xuelian Lin, and Wenzhong Tang. IEEE 4th International Conference on Cloud Computing Technology and Science (CloudCom), 2012.