Example Quote from Citations

Kevin Skadron
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IEEE Fellow, ACM Fellow

Similarity Score (SS) is used in web document clustering to compute the pair-wise similarity between pairs of web documents. The source code is from the Mars project [10] at The Hong Kong University of Science and Technology. Mars hides the programming complexity of the GPU behind the simple and familiar MapReduce interface.

Che, Shuai, Michael Boyer, Jiayuan Meng, David Tarjan, Jeremy W. Sheaffer, Sang-Ha Lee, and Kevin Skadron. "Rodinia: A benchmark suite for heterogeneous computing." **IISWC, 2009.**

John D. Owens
University of California, Davis
NVIDIA CUDA Fellow

sort small mapping outputs on the GPU. Mars [9] was the first large-scale, GPU- based MapReduce system. It works with a single GPU on a single node, but only on in-core datasets. CellMR [24] is a single-node implementation of

Stuart, Jeff A., Cheng-Kai Chen, Kwan-Liu Ma, and John D. Owens. "Multi-GPU volume rendering using MapReduce. **HPDC, 2010.**

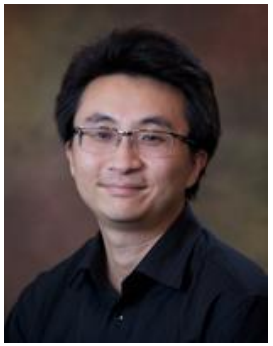
Example Quote from Citations

Gagan Agrawal

Ohio State University

core systems. Mars [9] was the first attempt to harness GPU's power for MapReduce applications. MapCG [10] was a subse-

Chen, Linchuan, Xin Huo, and Gagan Agrawal. "Accelerating MapReduce on a coupled CPU-GPU architecture." **SC, 2012.**



Jian Tang

Syracuse University

IEEE Fellow, ACM Distinguished Member

Mars [9] was the first known GPU-accelerated MapReduce system, which includes new user-defined and system APIs and a runtime system (based on NVIDIA GPUs). It needs to spend

Neshatpour, Katayoun, Maria Malik, Mohammad Ali Ghodrat, Avesta Sasan, and Houman Homayoun. "Energy-efficient acceleration of big data analytics applications using FPGAs." **IEEE BigData, 2015.**

Example Quote from Citations

Anshul Gandhi
Stony Brook University

Mars [12] was the first project to accelerate map-reduce using GPUs. It reimplements the map-reduce programming model in C++, without fault tolerance and only works for a single physical machine. Also, Mars does not use coupled

Jayaram, K. R., Anshul Gandhi, Hongyi Xin, and Shu Tao. "Adaptively Accelerating Map-Reduce/Spark with GPUs: A Case Study." **ICAC, 2019.**