Automated scalable PaaS platform makes it easier to choose resources on clouds. FutureGrid: testbed for Big Data scientific computing on cloud/grid/HPC. Evaluating available cloud network applications and capabilities. Benchmarking to improve IaaS cloud services. MapReduce applied in GPUs to handle data-heavy applications. Study of state-transition applications in parallel systems to handle large data loads and difficult algorithms; focuses on analysis of system’s processor speed. Argues against random data placement in frameworks like Hadoop and MapReduce; proposes DRAW to reorganize data distribution to achieve optimal parallelism.