Award honors computer work

David A. Bader, an assistant professor of electrical and computer engineering at the University of New Mexico, has been awarded the National Science Foundation's Faculty Early Career Development (CAREER) Award.

"Parallel computing has long offered the promise of very high performance, but it has delivered only in a narrow range of applications," Bader said. "With the advent of symmetric multiprocessors (SMPs), however, shared memory on a modest scale is becoming an available commodity. Over the next five to 10 years, clusters of SMPs will likely be the predominant architecture for scalable high-performance computing."

Bader's research plan will investigate new algorithms to support irregular computations, mostly tree- and graph-based, along with new insights on how to leverage the theoretical research in PRAM algorithms.