## The Barr Systems Lecture Series

presents

## **Professor Alok Choudhary**



Alok Choudhary is a John G. Searle Professor and chair of Electrical Engineering and Computer Science at Northwestern University. He is the founding director of the Center for Ultra-scale Computing and Information Security (CUCIS). Prof. Choudhary was a co-founder and VP of Technology of Accelchip Inc., in 2000, which was eventually acquired by Xilinx. He received the National Science Foundation's Young Investigator Award in 1993. He has also received an IEEE Engineering Foundation award, an IBM Faculty Development award, an Intel Research Council award. He is also a fellow of IEEE, ACM and AAAS. His research interests are in high-performance computing, data intensive computing, scalable data mining, computer architecture, highperformance I/O systems and software and their applications in many domains including information processing, scientific and computing.

## December 3, 2010 3:00 P.M.-4:00 P.M. E121 CSE Bldg.

## <u>High-Performance Data Mining: An Essential Paradigm for</u> <u>Knowledge Discovery</u>

Knowledge discovery in science and engineering has been driven by theory, experiments and more recently by large-scale simulations using high-performance computers. Modern experiments and simulations involving satellites, telescopes, high-throughput instruments, imaging devices, sensor networks, accelerators, and supercomputers yield massive amounts of data. At the same time, the world of business, traditional and online, as well as social communities are creating massive amounts of data at an astonishing pace. Thus high-performance data analytics and mining has become essential for knowledge discovery in science and engineering, as well as a business intelligence mechanism for operational success and sustainable competitive advantage in business.