## **UTD** EE Seminar Series & Dallas Chapter of IEEE Signal Processing Society Present

## Speeding up MATLAB Applications in Signal Processing

## Isaac Noh MathWorks

## 11am, Wed, Nov. 18, 2009 ECSS 2.102 (TI Auditorium)

In this seminar, we will discuss and demonstrate simple ways to improve and optimize your code that can boost execution speed by orders of magnitude. We will also address common pitfalls in writing m-code, explore the use of the MATLAB Profiler to find bottlenecks, and briefly introduce our Parallel Computing Toolbox and Distributed Computing Server to solve computationally and dataintensive signal processing problems on multicore computers and clusters. Highlights include:

- Understand memory usage and vectorization in MATLAB
- Address bottlenecks in your programs
- Optimize file I/O to streamline your code
- Transition from serial to parallel MATLAB programs
- Execute applications on a single multicore or multiprocessor desktop

Isaac Noh holds a M.S.E. from the University of Michigan, Ann Arbor in Aerospace Engineering and a B.S. from the University of California, Berkeley, in Mechanical Engineering. He spent two years as a Research Assistant at Lawrence Berkeley National Laboratory in the Plasma & Ion Source Technology Group. He joined The MathWorks in 2004. In 2006, he became an Application Engineer focusing on Technical Computing for The MathWorks.

For more information on the Dallas Chapter and directions to UTD, please refer to http://www.utdallas.edu/~kehtar/ieee-sp