Sensor, Signal & Information Processing (SenSIP) Center

Fulton School of Engineering, ASU - http://enpub.fulton.asu.edu/sensip/
Jointly with
IEEE Phoenix Section Communications and Signal Processing Chapter
Cordially invites you to attend a seminar given by

Linda Hinnov, Johns Hopkins University
Karthikeyan Natesan Ramamurthy, ASU SenSIP

Earth System Signals and J-DSP Modules on Global Sustainability, Natural Hazards and Space Navigation
Friday, January 22, 2010
3:00pm
GWC 487

Abstract

Java-DSP (J-DSP) has been previously used in Electrical Engineering for education and research. J-DSP has been used in class for signal processing, communications, and controls systems. More recently NSFhas sponsored a multi-university multidisciplinary grant to extend the use of J-DSP beyond Electrical Engineering. In 2007 the NSF Earth andAtmospheric Sciences Division funded a geological research project onAstronomical Time Scale Calibration. This research involves JohnsHopkins University, Arizona State University, and Purdue University.   Java-DSP has been adopted in this 3-year collaborative NSF project in Earth systems as the software tool to conduct research on data requiring depth-to-time transformations, filtering, windowing, spectral and statistical analysis. In the last two years J-DSP functionality has been extended to form the J-DSP/Earth SystemsEdition (J-DSP/ESE). A new family of functions created for earth data relating to applications in geology, exploration, sustainability, hazards, and space navigation are bundled in J-DSP/ESE. The functions of the J-DSP/ESE software will be disseminated to the earth systems and geology research and education communities. Several research and education modules are being created for J-DSP/ESE and will be demonstrated at the Geological Society of America (GSA) Eastern meeting in Baltimore.

Biography:

Austin in 1985, and Ph.D. in Earth sciences from Johns Hopkins University in 1994. She worked briefly in the seismic processing industry from 1979-1981, then at the U.S. Naval Observatory on the excitation of Earth's polar motion, and subsequently, on the astronomical forcing of the Earth's paleo climate system at Johns Hopkins University, Linda Hinnov received her B.A. in music theory from Princeton University in 1979, M.A. in geophysics from UT, where today she is an associate research professor in the Department of Earth and Planetary Sciences. She has a longstanding interest in the statistical time series analysis of Earth system signals relating to past global climate change, Earth's tidal evolution and rotational history, and the high-resolution calibration of geologic time.
http://www.jhu.edu/~lhinnov1/hinnovcv.htm

Karthikeyan Natesan Ramamurthy is a Ph.D. student working in signal processing at Arizona State University. He is currently working in broad areas of machine learning from the signal processing perspective focusing on problems of signal representation, classification and clustering. Major applications of the research are in computer vision problems. He is also working on signal processing for earth systems and he created several functions
for the J-DSP/ESE areas.

Refreshments will be served