

COMPUTER SCIENCE  
SEMINAR

*Computerized Image Analysis for Biomedical Translational  
Research*

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**Abstract:** Abstract: In biomedical research, availability of an increasing array of high-throughput and high-resolution instruments has given rise to large datasets of "omics" data - such as genomics, proteomics, metabolomics - and imaging data - such as radiology and microscopy imaging. These datasets provide highly detailed views of biological systems and functions. The Emory In Silico Brain Tumor Research Center (EISBTRC), a National Cancer Institute In Silico Research Center of Excellence, has focused on the analysis of Glioblastoma (GBM), a deadly form of brain cancer with a median survival of six months. We are now carrying out large-scale in silico experiments with public datasets for Glioblastoma (GBM) brain tumor research for a better understanding of the biological underpinnings that drive the rapid progression of this devastating disease.. In this talk, I will discuss our work on large-scale micro-anatomic feature extraction and integration with genomics and patient survival.

Bio:

Jun Kong is a research scientist in the Center for Comprehensive Informatics at Emory University. Dr. Kong received his Ph.D. degree in the Dept. of Electrical and Computer Engineering at Ohio State University in 2008. Dr. Kong's research interests include computer vision, statistical machine learning, and medical/microscopy image analysis. He developed Computer-aided Diagnosis (CAD) systems for analyzing a large volume of microscopy images of histologic specimens with intensive use of computer vision and pattern recognition techniques.

Friday, October 7, 2011, 3:00 pm  
Mathematics and Science Center: W301

MATHEMATICS AND COMPUTER SCIENCE  
EMORY UNIVERSITY