

When: Friday 13:50 - 14:50

ETB 1035 Where:

**Prof. Ulisses Braga-Neto** Speaker:

**Associate Professor** 

Department of Electrical & Computer Engineering

Texas A&M University



Title: Pattern Recognition for Small-Sample Genomic Data

Date: 10-20-2017

Modern biomedical applications based on genomic and proteomic expression profiles often produce large amounts of data characterized by a very large number of measurements made on a much smaller number of sample points. This introduces difficult challenges in the application of classification methods to obtain accurate predictive models. In this talk, we discuss our recent work on this topic, highlighting Bayesian approaches to classification of proteomic and metagenomic data, as well as novel approaches for classification and error estimation based on restricted and nonstationary data.

Biography: Dr Braga Neto received the baccalaureate degree in Electrical Engineering from Universidade Federal de Pernambuco in Brazil, and M.Sc. and Ph.D. degrees in Electrical and Computer Engineering from The Johns Hopkins University. He is currently an Associate Professor of Electrical and Computer Engineering at Texas A&M University. His main research areas are statistical pattern recognition, machine learning, signal and image processing, and systems biology.