

1116-60-1173 **Nguyet T. Nguyen*** (ntnguyen01@ysu.edu), Department of Mathematics & Statistics, One University Plaza, Youngstown, OH 44555, and **Dung A. Nguyen** (dung@ndr.com), 600 Bird Bay Drive West, Venice, FL 34285. *Regime Switching Model for Economic Crisis and Stock Selection.*

In this talk, we will use regime switching model (or hidden Markov model) to predict economic crisis (or recession regime) using some macro economics variables such as Inflation (CPI), Economics Growth (GDP), Stock Market Index (S&P500) and Market Volatility (VIX). We also analyze the performances of all of the S&P 500 stocks during economic regimes to make a monthly stock selection for our investment portfolio. Our numerical results showed that our portfolio had higher returns and lower risk compared to the benchmark index S&P 500. (Received September 17, 2015)