# Graduate Seminar

Department of Economics and Finance

College of Business and Economics

# Robert Adcock

MA Candidate

Supervisor: Dr. Nikola Gradojevic

**Forecasting Bitcoin Returns with Simple Technical Indicators and Neural Networks**

Bitcoin is the largest cryptocurrency in the world, but its lack of quantitative qualities makes fundamental analysis of its intrinsic value difficult. Therefore, technical analysis is the required method of future value derivation. Using simple technical indicators, I can predict Bitcoin return with a neural network. I created buy-sell signals using past returns from April 2011 to March 2018 and ran several models over the full period and four subsamples. I was then able to examine the impact simple technical indicators have on the predictability of returns. I find that neural networks improve the predictability of returns and sign prediction over the benchmark random walk model. However, subsampling suggests that this success varies over the period.

**Date: Friday June 29th 2018**
**Time: 1:30pm**
**Room: Mackinnon 720**