## UNIVERSITY OF SOUTH FLORIDA

## Major Research Area Paper Presentation

Lung CT Radiomics: An Overview of Using Images as Data

> by Samuel Hawkins

For the Ph.D. degree in Computer Science & Engineering

Lung cancer is the leading cause of cancerrelated death in the United States and worldwide. Early detection of lung cancer can help improve patient outcomes, and survival prediction can inform plans of treatment. By extracting quantitative features from CT scans of lung cancer, predictive models can be built that can achieve both early detection and survival prediction. To build these predictive models, first the nodule is segmented, then image features are extracted, and finally a model can be built utilizing image features to make predictions. These predictions can help radiologists improve cancer care.

February 27<sup>th</sup>, 2017 1-2 PM ENB 313

## THE PUBLIC IS INVITED

Examining Committee

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