

UNIVERSITY OF SOUTH FLORIDA

Defense of a Master's Thesis

Beyond the Hype: Challenges of Neural Networks as Applied to Social Networks

by
Anthony Hernandez

For the MS degree in Computer Science

Recent advances in neural network-based machine learning algorithms promise a revolution in prediction tasks across a variety of domains. Social media seems an ideal context for applying neural network techniques, as they provide large data sets and challenging prediction objectives. Two studies are conducted in this work exploring potential limitations of deep neural networks. The first describes whether a Generative Adversarial Network can be used for anonymization. We find issues in how the graph is assembled and how the generator learns attributes for nodes. The second describes whether a Graph Convolutional Network can forecast user activities from popular social networks sites. We find the model used suffers limitations related to dataset characteristics, specifically temporal aspects of user behavior.

Monday, June 29, 2020

1:00 PM

Online (Blackboard Collaborate)

Please email for more information

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THE PUBLIC IS INVITED

Examining Committee

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