



COLLEGE of ENGINEERING  
AND PHYSICAL SCIENCES

SCHOOL OF COMPUTER SCIENCE

## MSc Seminar

Friday April 19, 2024, at 11AM, online via Zoom (Remote)

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*Comparative Study of Deep Learning Models for Sentiment Analysis*

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### Abstract:

The rapid expansion of online applications like social media apps and e-commerce websites has led to a large volume of reviews about different subjects, products, and services. Sentiment analysis, which is a crucial area of study in natural language processing, aims to detect and classify the sentiments of these reviews so that the feedback can be valuable to companies, governments, and individuals in making informed decisions based on the information gathered about the public opinions.

A multitude of methodologies have been proposed for sentiment analysis, encompassing lexicon-based approaches, conventional machine learning techniques, and advanced deep learning models. In this study, I will focus on the evaluation and comparative analysis of leading deep learning models, specifically Convolutional Neural Networks (CNNs), fine-tuned Large Language Models, and Prompt-based approaches, to assess their efficacies for sentiment analysis.