Research Proposal Outline

Implementing Cyber Security tools and/or techniques in detecting medical misinformation on a social media platform of Twitter

Ying Chan

Hong Kong

University of Essex

Research Methods and Professional Practice November 2022

Unit 8

# Introduction

Research for implementing Blockchain technology in detecting medical misinformation on Twitter.

# Significance/Contribution to the discipline/Research Problem

There is a restriction on video analysing that must convert to text or image using Artificial Intelligence (AI) or Machine learning (ML) technologies to determine if text content has been altered. Blockchain technology demonstrates the authenticity of material, particularly video.

# Research Question

1. What other strategies and tactics have been suggested by earlier studies to use blockchain-based in social media?
2. What are the current issues and constraints with social media blockchain applications?
3. What are the gaps that potential future research might fill?

# Aims and Objectives

Find out the efficient and possible to implement Blockchain technology in detecting medical misinformation.

# Key literature related to the project.

* Fake News Detection in Social Media using Blockchain  
  DOI: 10.1109/ICSCC.2019.8843597
* Fake News Detection based on Blockchain Technology  
  DOI:10.1109/PIMRC54779.2022.9978074
* Authentic Facts: A Blockchain Based Solution for Reducing Fake News in Social Media  
  https://doi.org/10.1145/3510487.3510505
* The Application of Blockchain in Social Media: A Systematic Literature Review  
  Appl. Sci. 2022, 12(13), 6567; https://doi.org/10.3390/app12136567
* Tweetchain: An Alternative to Blockchain for Crowd-Based Applications  
  DOI: https://doi.org/10.1007/978-3-319-60131-1\_24

# Methodology/Development strategy/Research Design

Quantitative Research

The simulation of the blockchain detectors to compare the accuracy, efficiency, speed and controllability.

# Ethical considerations and risk assessment (as part of your ethical approval application).

* Privacy data with blockchain technology
* Data Accuracy

# Description of artefact(s) that will be created (if applicable).

The detectors that use blockchain technology.

# Timeline of proposed activities.

1. Develop the 3 types of detectors and testing (4 weeks).
2. Run simulation (2 weeks).
3. Compare the data (2 weeks).