# **Proof of Concept II FOAR705 Digital Humanities**

# Roslyn Walker Student Number 45149631

## **ABSTRACT**

Technology deployment computational analysis: virtual exhibition of visual content sourced from social media.

Keywords: Existing platforms and systems: research photo tool, document management system, bibliography software.

# **COMPUTATIONAL ANALYSIS**

Computational thinking is made up of four parts:

- 1. Decomposition
- 2. Pattern recognition
- 3. Pattern generalisation and abstraction
- 4. Algorithm design

# 1 DECOMPOSITION

In my Scoping Paper I, I identified the objective of the project is to build a repository for images online from social media that will form data for my thesis. Copyright management is in the scope of this project. The tasks include developing a dataset of images for cataloguing and adding contextual information about visual works in an archive collection (that is thematic tagging, making connections between objects, people, dates and places).

## **2 PATTERN RECOGNITION**

- 1. Capture material through thematic tagging to enable virtual exhibition display of content. I would like to curate these materials as a virtual exhibition.
- 2. Prepare a list of data types drafted as a tabular list in a word document and place this information into a spreadsheet format (Excel). The data types will be selected from standard usage terms of archive repositories. Description of images of other fields for the content records.
- 3. Output: Coding sheet of terms, Readme files, control vocabulary to make the task of tagging digital records easier when posting them to the repository as visual objects.
- 4. Data source files: Images sourced from social media hashtag publics on Instagram and Twitter.
- 5. Copyright restrictions on content may prevent the use of this material.
- 6. It would be great if I could automate the application of data tags and classification to the digitised record. I would like a tool that automatically applies tagging to the digital record.

# **3 PATTERN GENERALISATION AND ABSTRACTION**

- 1. Initial setup format of data tables and resolve formatting issues for tabular data.
- 2. Source images and resolve copyright issues.
- 3. Discovery process for image use consider links or export options.
- 4. Filter, sort and display of image and descriptive fields.

#### 4 ALGORITHM DESIGN

- 1. Capturing material through thematic tagging to enable virtual exhibition display of content.
- 2. Images tagged in hashtag publics on social media platforms: FridaysForFuture YouthStrike4Climate ClimateEmergency GretaThunberg climatejustice ClimateStrike ExtinctionRebellion and ClimateHoax ClimateDenial

## **POSSIBLE SOLUTIONS**

Consideration to use a combination of the application of existing platforms and systems:

- 1. https://tropy.org/ an example of a research photo tool to locate archival sources to write about them.
- 2. Document management system (CMS or DMS)
- 3. Bibliography software like Zotero

## SOME EXAMPLES OF DATA SOURCES

# **Figures**



Figure 1. Source: Twitter, ClimateStrike, 22 August 2019.



**Figure 2.** Source: Instagram, Schoolstrike4climate, 22 August 2019.