**MSc Sustainable Heritage**
Module BENV0115: **MACHINE LEARNING FOR HERITAGE**

COURSEWORK: CREATING A BANKSY DETECTOR

ASSIGNMENT BRIEF

You have been given a classification problem. The dataset is a collection of images of works by street artists, including Banksy, Blek le Rat and others. The dataset also includes numerical values that characterise each image, as well as a metadata file that describes what they mean.

Your task is to use this da[...] need to implement the learning al[...] rt technical report describing the solu[...] n code as a Google Colab Notebook i[...]

You can use any machine [...] ou must use the provided dataset, but [...] el, and even extend the dataset with fu[...]

Using ChatGPT (or equi[...]

A unique element of this [...] f the code-writing. You are expected [...] t AI tool. You need to indicate which pa[...] k. Later, you will have to provide a sho[...]

Word length and docum[...]

The report should have a[...] but excluding the appendices. The repo[...] rking rubric for further details about what[...]
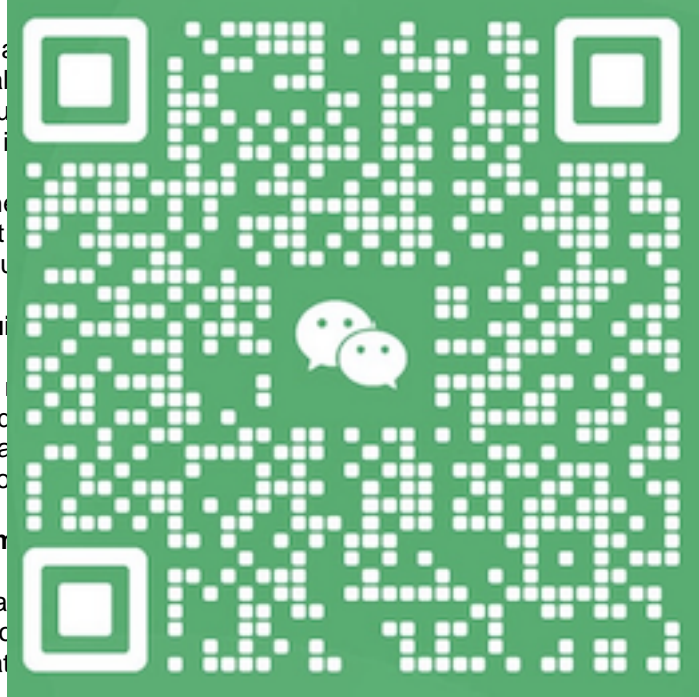
1. **Introduction**.
   This part should explain the problem you are solving and justify the approach you are taking. Include:
   - A definition of the problem
   - A justification of the interest or importance of the problem.
   - Your objectives

2. **Related work and possible applications to heritage.**
   This part should connect your problem with a few examples of related work, in heritage and beyond.

   - Similar or analogous examples in heritage.
   - If these do not exist, use examples from other fields and speculate about their potential use in heritage.
   - Justify well the relationship between the cases you cite and the problem you are solving

3. **Problem definition and dataset.**
   This part should describe the problem in machine learning terms, including the dataset and how it is prepared for machine learning.

   - Describe the dataset with summary statistics, indicating its main features.
   - Identify the input features.
   - Explain normalisation, nonlinear transforms, and any other preparatory steps.
   - Describe the sets for training, testing and validation (if applicable)

4. **Methods and algorithms.**
   This part should explain and justify the machine learning algorithm in a manner that would allow anyone to reproduce what you did. Include:

   - A description of the implemented methods. Equations are optional and should be used only when necessary to communicate concepts.
   - The regularisation method (if applicable)
   - The validation method (if applicable)
   - The selection of hyperparameters

5. **Results and disc**
   This part should   l data. Include:
   - The meth
   - Appropri
   - The mod   sing the results
     in relation

6. **Critical reflectio**
   This part should   TP or an
   equivalent AI. Yo
   - Describe
   - Describe   the AI output
   - Reflect c   eaknesses of
     ChatGP

7. **References**
   List any literature   m.

8. **Apppendix**
   Annotated code f   le Colab
   Notebook in the a   y-paste it in the
   browser. When y   anyone with the
   link using the dialog below.
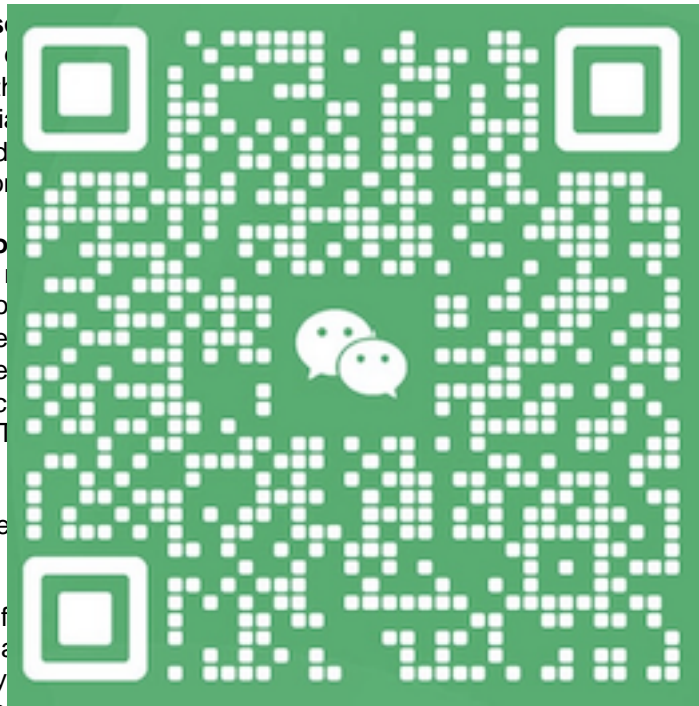
General access

🌐 **Anyone with the link** ▾
   Anyone on the Internet with the link can view   Viewer ▾

ⓘ Viewers of this file can see comments and suggestions

🔗 Copy link   **Done**