

SIMON CARTHEW, CRTSIM008

HIGH RISK APPLICATIONS The EU regulates projects utilising machine learning and artificial intelligence using a risk based method. Projects are grouped into minimal risk, limited risk, high risk and unacceptable risk. If any of the following criteria are met then the proposed project will be labelled as high risk and requires ethical clearance from a governing body: - Biometric identification and categorisation of natural persons - Management and operation of critical infrastructure - Access to education and vocational training - Employment, workers management and access to self-employment - Access to and enjoyment of essential private services and public services - Use in law enforcement - Migration, asylum and border control management - Administration of justice and democratic processes

PROPOSED PROJECT ANALYSIS The proposed project utilises machine learning techniques, a form of artificial intelligence, to locate and categorise meerkat behaviour in images captured by a camera trap in their natural environment. The application of machine learning in this context does not meet any of the criteria to make it a high risk system. The classification algorithm will be trained using a dataset of annotated footage of meerkats in a zoo environment (<https://meerkat-dataset.github.io/>). The dataset blurs out all humans that may occur in the camera footage and was released with a formal research paper (<https://arxiv.org/abs/2306.11326#>) which shows that it has been through a formal publication process that adheres to the common ethical scientific standards. The classification will not be trained to classify any natural human and all people involved in the deployment of the final camera trap will be aware of the cameras presence and what the footage will be used for. The implementation of the system will not have any negative effect on the animals that it is monitoring and will be designed to be as non-intrusive as possible.