Figure 4. Multimodal Classification model architecture

Generative Models for Missing Cultural Data Completion

Our third A.I. based approach tackles a very innovative challenge- the completion of missing data using generative models. Generative models, in comparison with other machine-learning approaches do not require labeled data which is in fact, a real advantage in our case study. The approach we have developed uses Deep Convolutional Generative Adversarial Networks (DCGAN) for visual data completion. Our DCGAN is trained to generate artistic data. We then use a visual completion approach to generate a similar looking sample to the asset that we want to complete, benefitting from the available information to fit the generated sample to the context of the damaged asset.
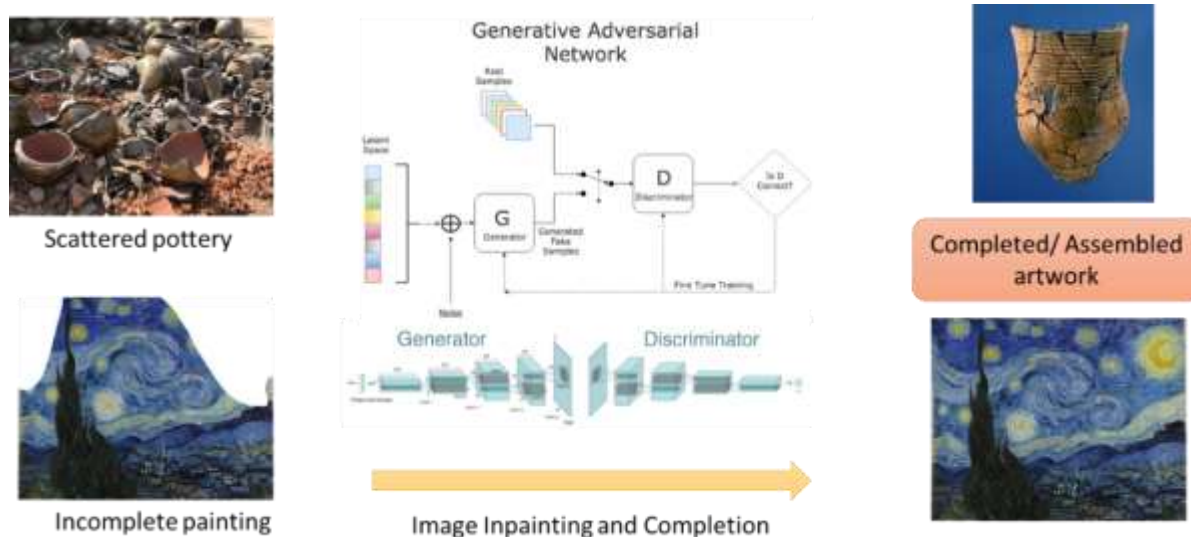

Figure 5. Generative models - Cultural data completion