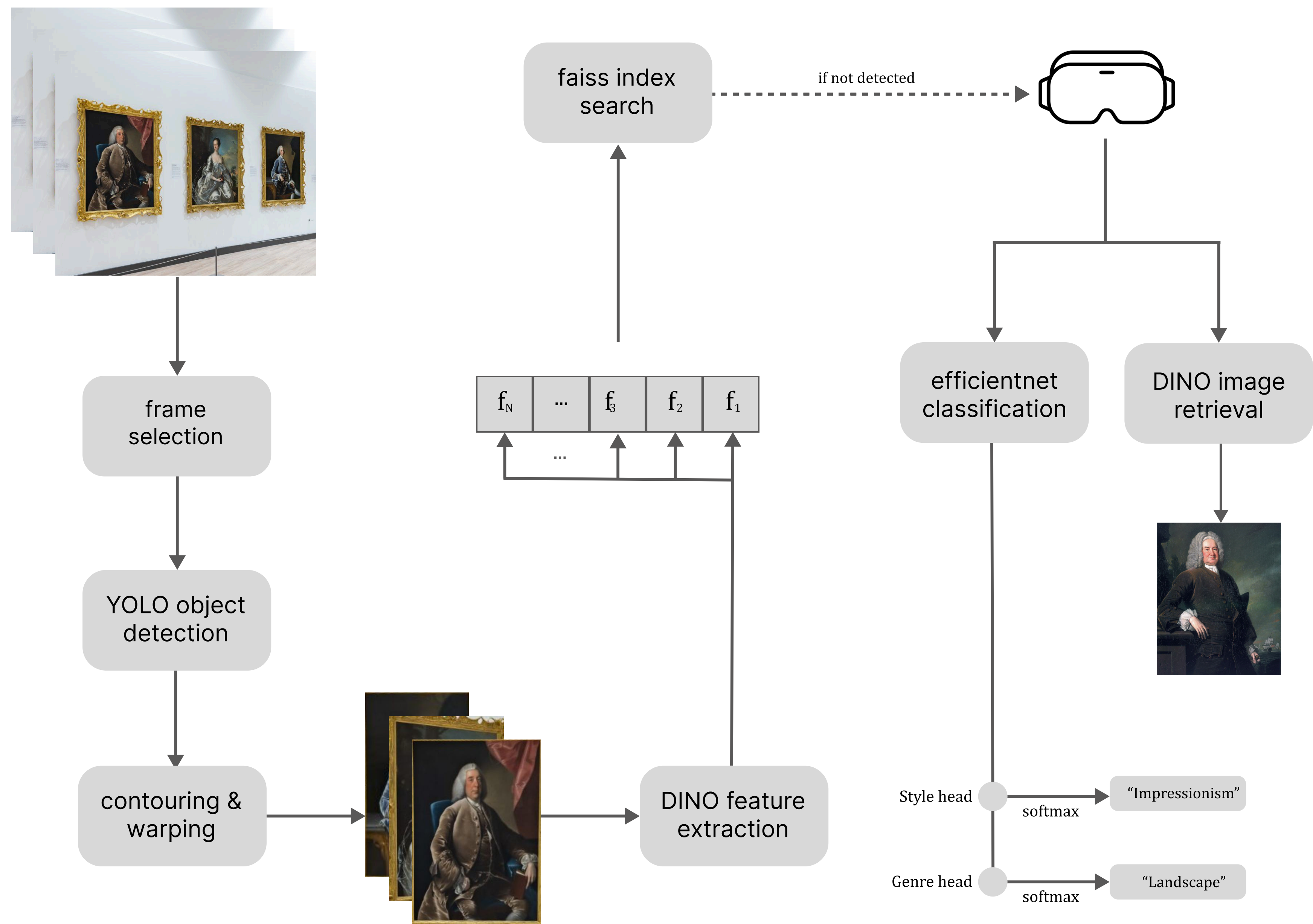


# VMART

Rethinking Art Gallery Experience through Painting Detection,  
Classification and Retrieval

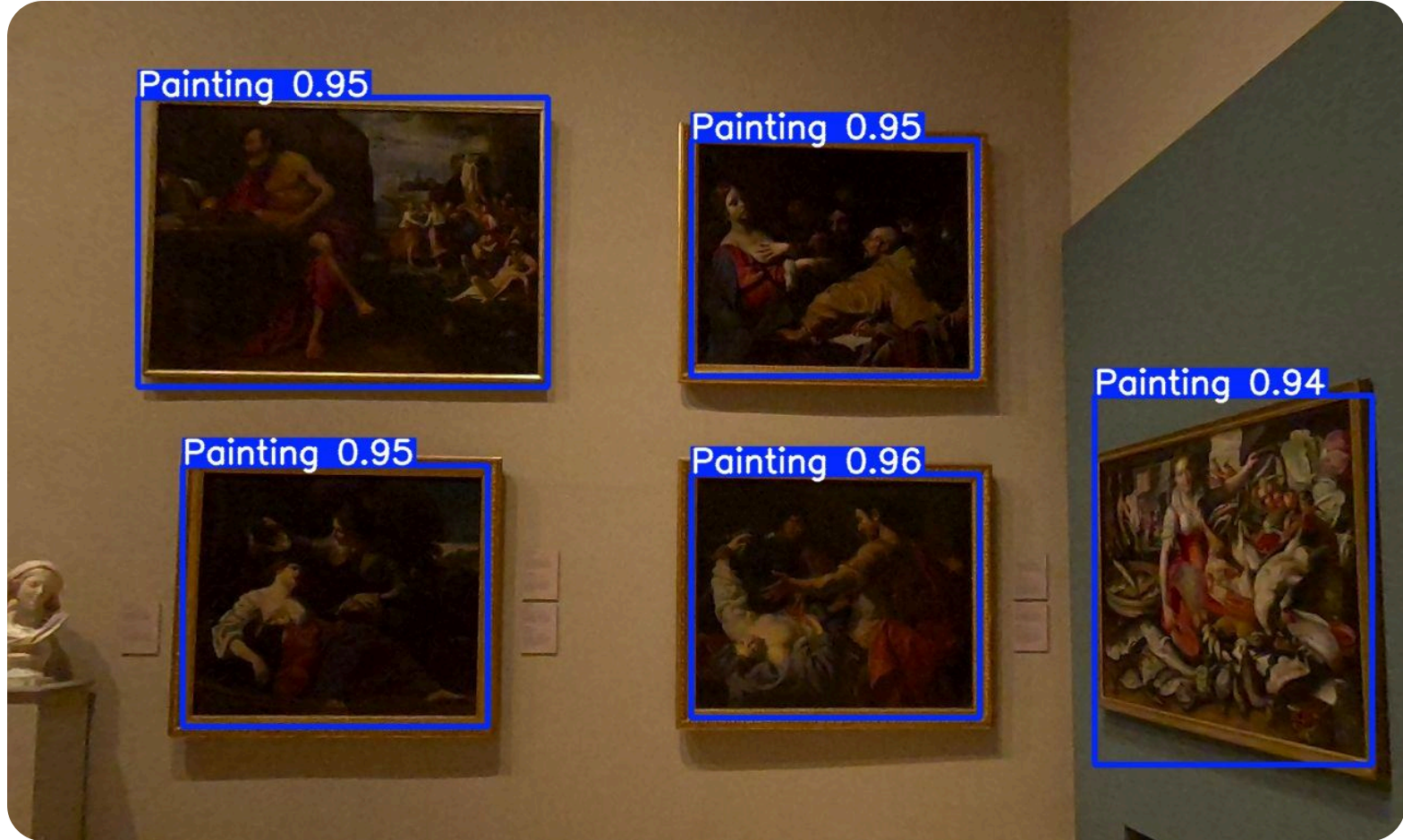
D. Bilardello - F. Melis - E. Prato

# Approach





# Object Detection



- Hough-based Detection
- Contour-based Detection
- YOLO Detection



frame  
selection

YOLO object  
detection

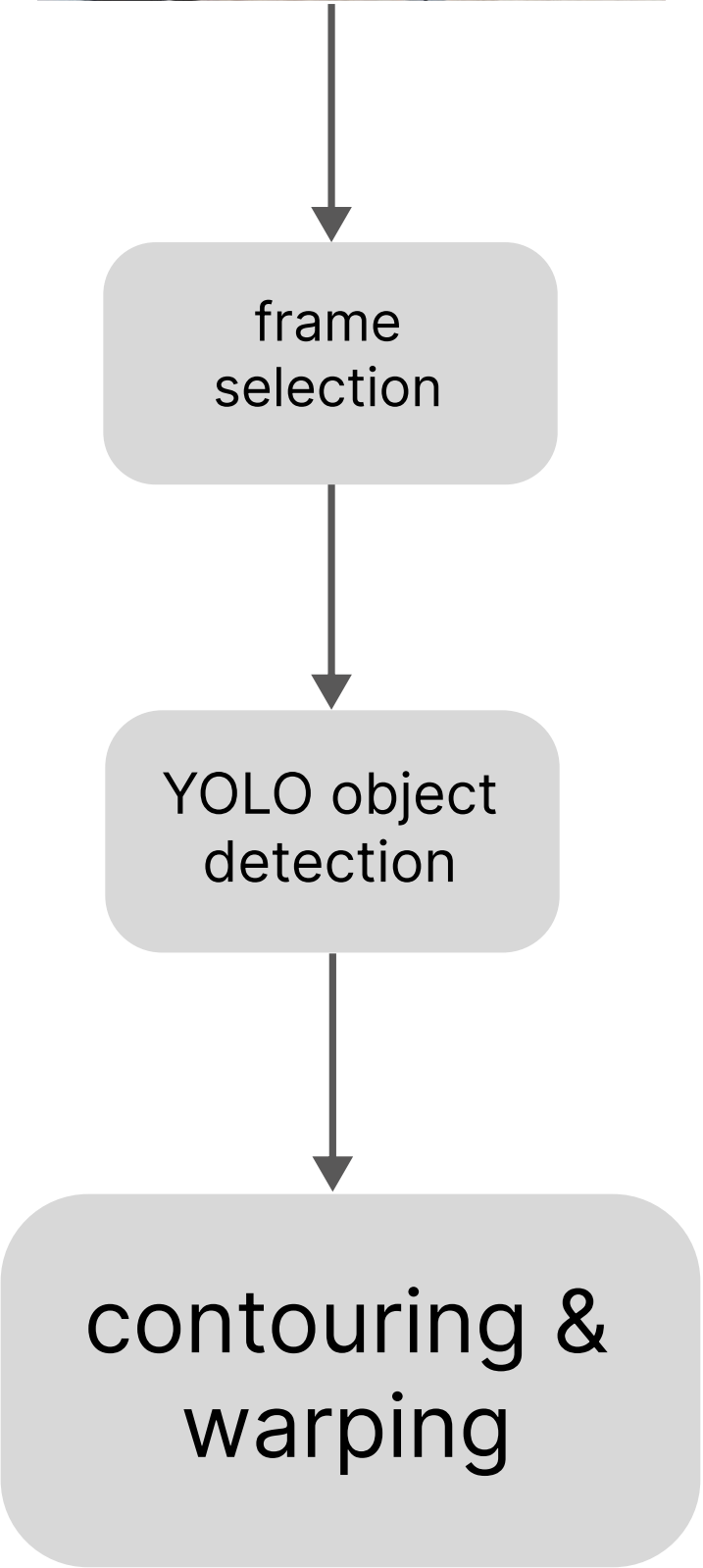
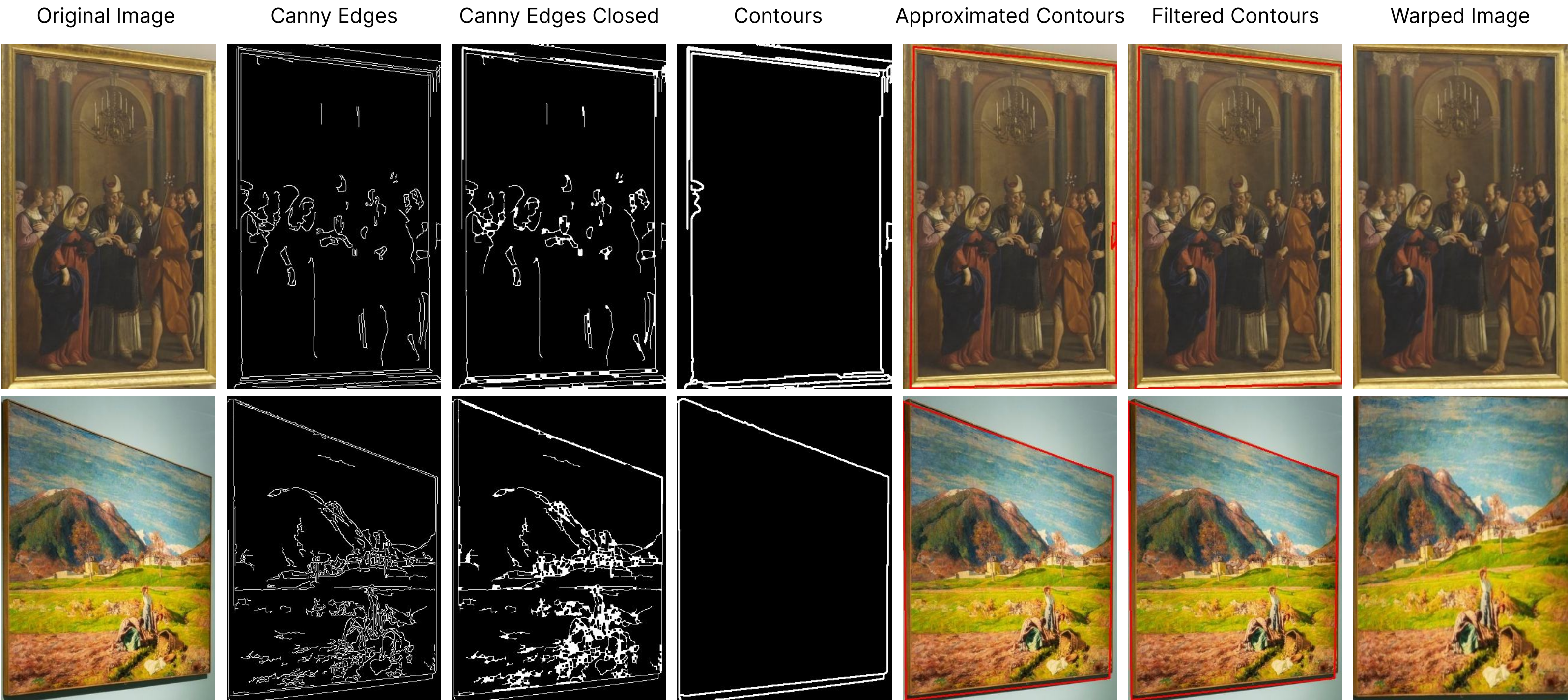
contouring &  
warping

Results





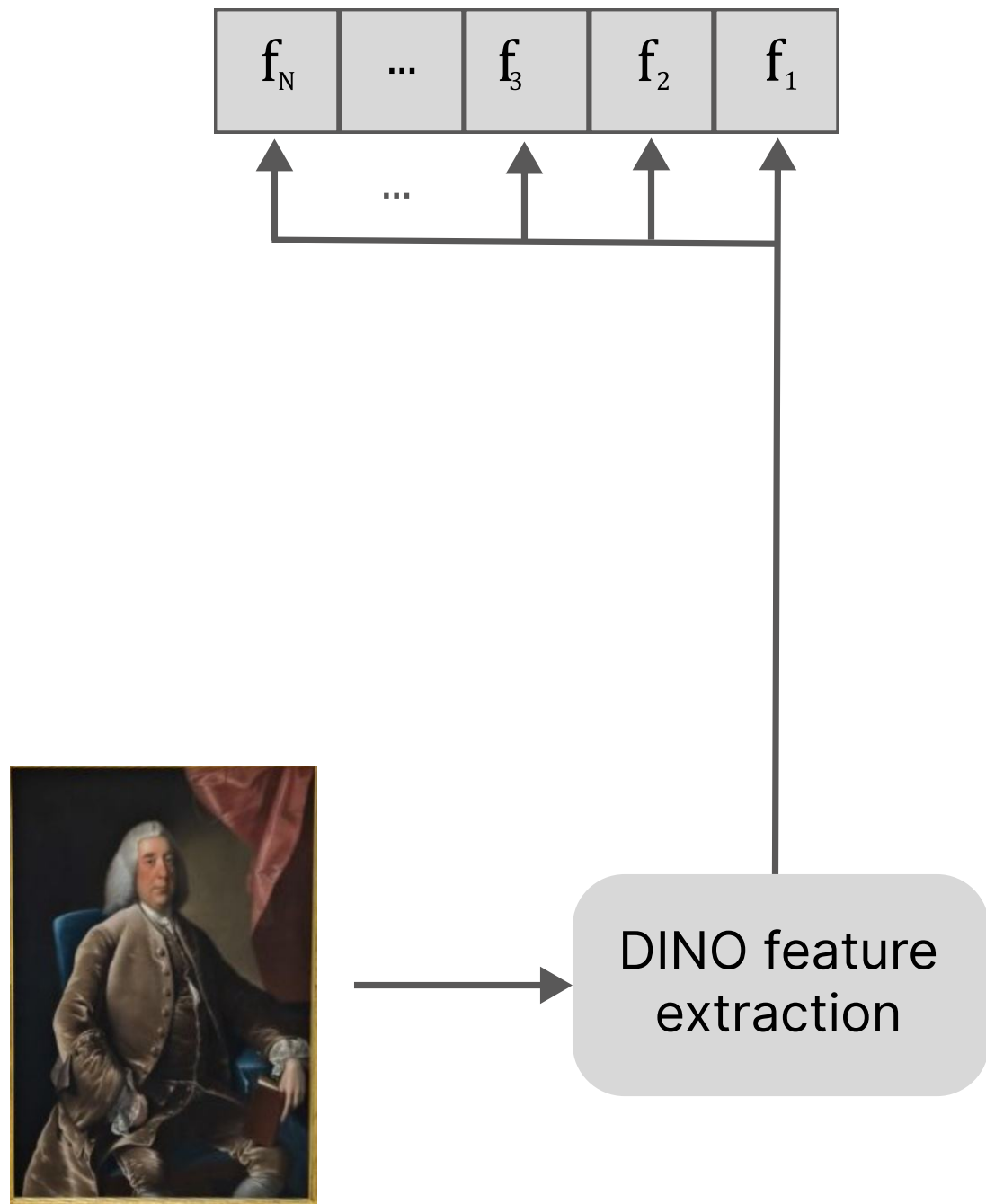
# Transformation



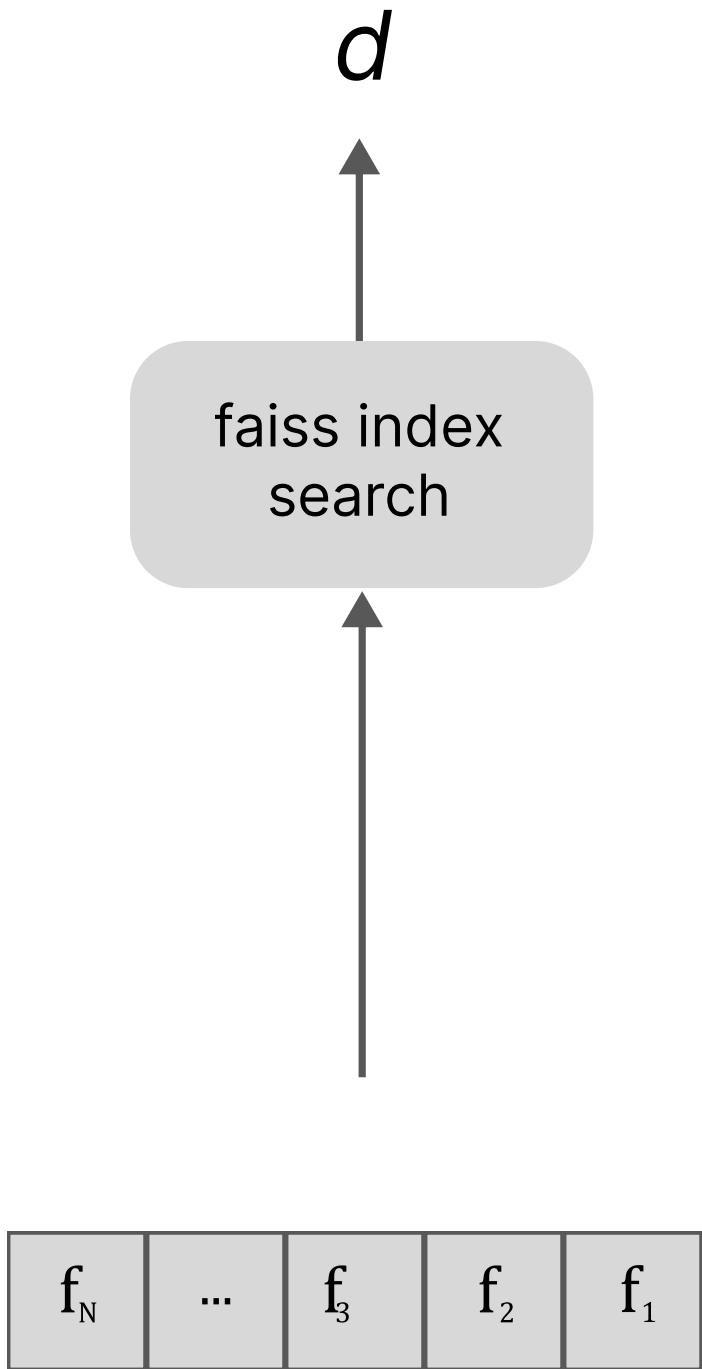


# Feature extraction

## DINO embeddig creation



## FAISS search



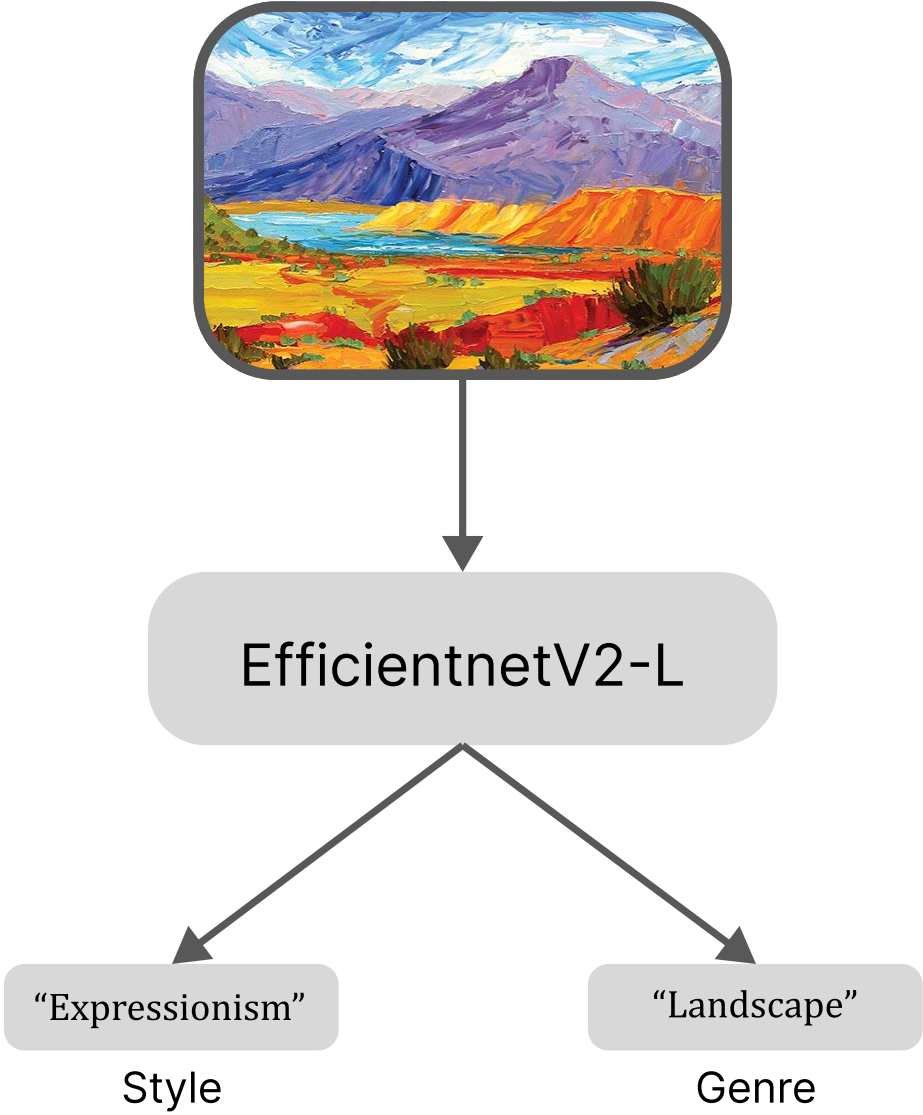
## Thresholding

*if  $d < \tau \Rightarrow$  discard it*

*otherwise add to index*

# Classification

Model



Dataset



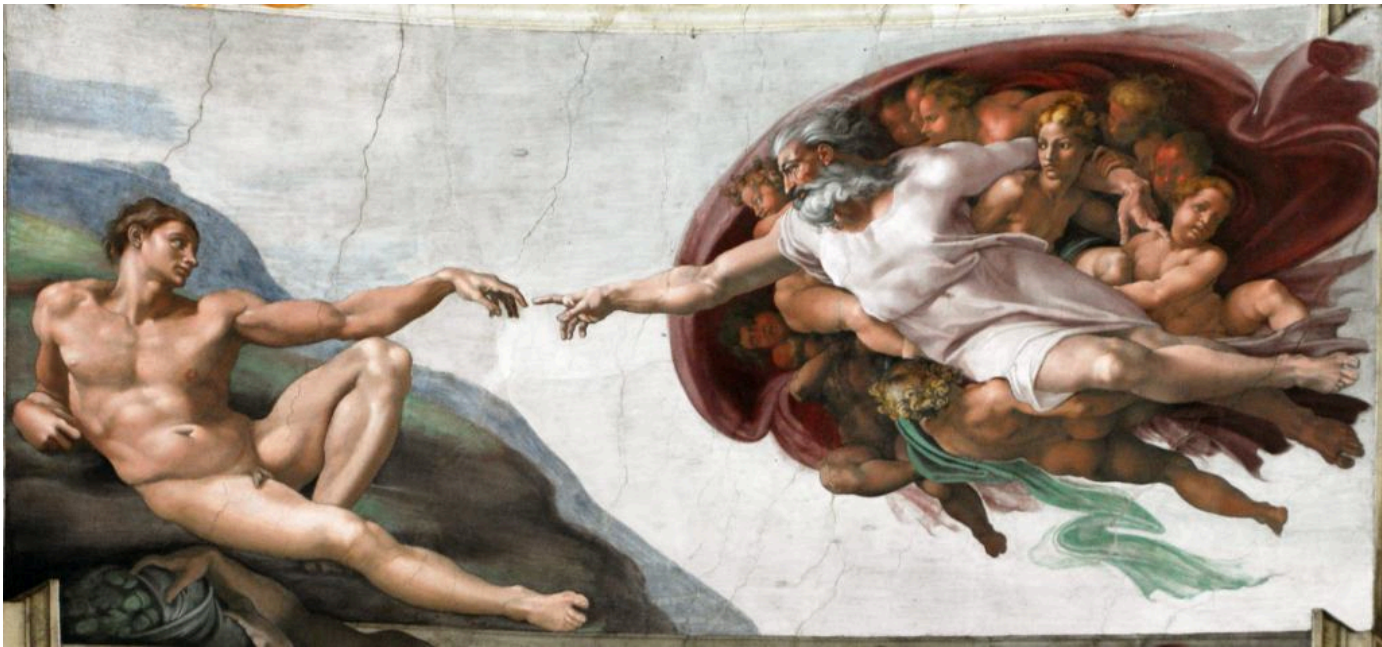
Result





# Retrival

Input



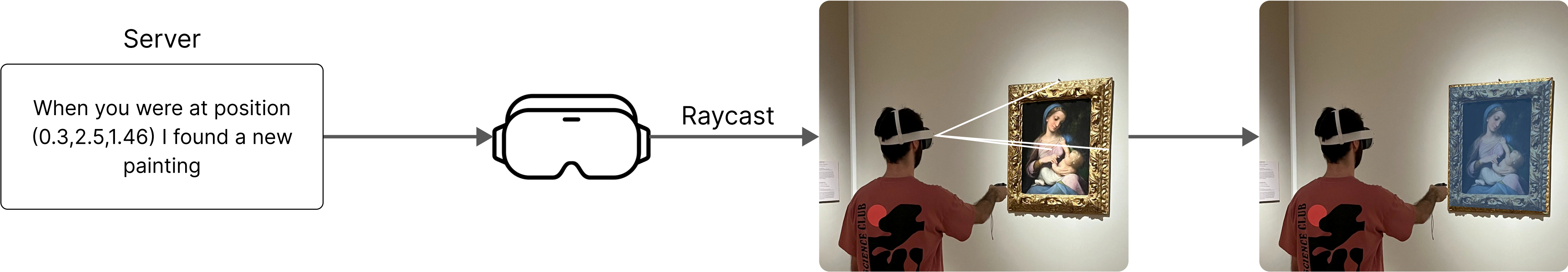
FAISS Search



Outputs



# Meta Quest interaction



## Result





**Thanks for your <sub>self</sub> attention**