

# PERCEIVE: Perceptive Enhanced Realities of Colored collections through AI and Virtual Experiences

## Project summary

PERCEIVE aims at improving the perception, preservation, curation, exhibition, understanding and access of colored Cultural Heritage collections. It aims at developing a reliable way to Study, Reconstruct, Render, Remap, Exhibit and Re-appropriate them. These collections are, in fact, a priority because of their high fragility that requires shared methods to preserve and exhibit them (i.e. textiles start fading in only 10 years, while only small traces of the original polychromy on classical statues is left today), because of the complexity of their study (especially with the attempts of reconstructing their original appearance), and because of the importance of their communication to future generations and of the shaping of European common identity around the concepts of “care” and diversity/ variety” (i.e. the different shades of skin colors that were common in the Greek and Roman times). PERCEIVE starts from the twofold needs of better preserving and communicating colored artworks, improving and speeding up scientific process results, that could better be used to maximize visitors' experience with the physical and the digital colored collections. Following the coronavirus emergency, in fact, museums have proved to lack of a digital policy that could guarantee a sustainable remote access for visitors. PERCEIVE aims at advancing the digital capability of scientists and cultural institutions, through a service-based AI architecture and tool-kit; and by developing a new design theory for onsite and remote VR/AR/MR experiences, based on “Care” “Accessibility” and “Authenticity” concepts, with and for the creative industries. Our expected outcomes include services and tools including: a PERCEIVE Tool Kit connected to an online easy-to-use Service, PERCEIVE Experience Prototypes for the visitors, PERCEIVE Design Tool Kit for designers and educators.

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