

## TimeMatrix for Researchers Webinar

### Objectives

In caption generator systems, the identification of the figures depicted in an image depends on a matrix of weights for each of the classes with which the system has been trained. Current caption generators are trained with images that reflect present time lifestyles. Therefore the matrix is in fact a TimeMatrix of the present. The course will show how the identification of classes varies as the matrix of weights depends on data relative to past centuries. This produces a time machine effect where the bike of a person in the TimeMatrix of the present becomes a horse of Saint George in the TimeMatrix of the 15th century.

This webinar will demonstrate the Saint George on a Bike project results and potential to adapt automatically produced descriptions of paintings to the time period when they were created. The course will pose and discuss challenges for researchers. At the end of the course, a demo will be conducted to show correction of anachronisms and class refinement examples.

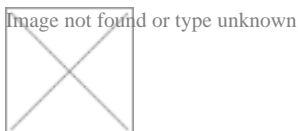
### Requirements

Active interest in cultural heritage a must.  
Basic knowledge of Natural Language Processing a plus.  
Using Neural Networks a plus.

### Learning Outcomes

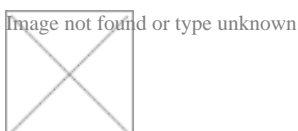
Participants will be introduced to what we call the time machine effect, which consists of the objects of an image being transformed via deep learning methods to similar concepts that are more appropriate to another time period. The technical challenges and current solutions will be discussed.

#### Academic Staff



Maria Cristina Marinescu (CASE Department, Barcelona Supercomputing Center)  
Joaquim More Lopez (CASE Department, Barcelona Supercomputing Center)  
Artem Reshetnikov (CASE Department, Barcelona Supercomputing Center)  
Albin Larsson (Europeana)

#### Further information



Learn more about the Saint George on a Bike project: <https://saintgeorgeonabike.eu/>

Barcelona Supercomputing Center - Centro Nacional de Supercomputación

---

**Source URL (retrieved on 18 abr 2024 - 06:27):** <https://www.bsc.es/ca/education/training/other-training/timematrix-researchers-webinar>