

HEIBRIDS LECTURE SERIES

LECTURE SERIES



Wednesday

19th April 2023

16.00 – 17.00

Location: ECDF (PhDs)
and Zoom – contact
sandra.pravica@tu.berlin.de
for registration, pls.

“Towards Trustworthy Computer Vision Models”

Speaker: Tatiana Tommasi (Politecnico di Torino)

- online lecture -

Abstract

Deep Learning models are becoming ubiquitous in our daily lives, we often use AI solutions even without realizing it. In this talk I will focus on computer vision approaches and discuss relevant aspects that can make them trustable. Indeed, they should provide high accuracy even in open-world conditions, facing novel categories and novel visual domains. Moreover, they should guarantee fairness, avoiding to rely on data that contain stereotypes and bias on sensitive attributes. Finally, they should be robust to hardware and software faults. I'll present some examples of these cases, discussing possible solutions and future directions.

Bio:

Tatiana Tommasi is Associate Professor in the department of Control and Computer Engineering of Politecnico di Torino (IT), Affiliated Researcher at the Italian Institute of Technology, ELLIS scholar and director of the ELLIS Unit in Turin. She received the PhD at EPFL Lausanne (CH) in 2013 and spent post-doctoral periods in Belgium and USA before covering the role of assistant professor at Sapienza University (Rome, IT). Tatiana has published more than 50 papers at top conferences and journals in machine learning and computer vision. She has a strong record in theoretically grounded algorithms for automatic learning from images with robotics, medical and human-machine interaction applications. She pioneered the area of transfer learning in computer vision and has extensive experience in domain adaptation, generalization, multimodal and open-set learning.