

# Through the Philosopher's Glass

Marcello Pelillo

*Ca' Foscari University of Venice, Italy*

## Abstract

Scientists have typically divergent attitudes towards philosophy, ranging from those who think that science without epistemology is “primitive and muddled” (Einstein) to those who claim we should not expect philosophy to provide them “with any useful guidance about how to go about their work” (Weinberg). Although both positions contain an element of truth, in this talk I’ll side with the former, in the conviction that a greater awareness of the philosophical questions underpinning one’s research field can only be beneficial and, in any case, can’t do any harm. In particular, I’ll take the view that machine learning and pattern recognition are “a continuation of epistemology by other means” (\*), and will try to critically examine some of the most fundamental (and often tacit) assumptions of our field through a philosopher’s lens. This could be an opportunity for reflection, reassessment and possibly some synthesis, with a view to provide the field a self-portrait of where it currently stands and where it is going as a whole.

[\* Liberally adapted from Carl von Clausewitz.]

**Marcello Pelillo** is Professor of Computer Science at Ca' Foscari University in Venice, Italy, where he directs the European Centre for Living Technology (ECLT) and the Computer Vision and Pattern Recognition group. He held visiting research positions at Yale University, McGill University, the University of Vienna, York University (UK), the University College London, the National ICT Australia (NICTA), and is an affiliated faculty member of Drexel University (USA). He has published more than 200 technical papers in refereed journals, handbooks, and conference proceedings in the areas of pattern recognition, computer vision and machine learning. He is General Chair for ICCV 2017, Track Chair for ICPR 2018, and has served as Program Chair for several conferences and workshops, many of which he initiated (e.g., EMMCVPR, SIMBAD, IWCV). He serves (has served) on the Editorial Boards of the journals IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI), Pattern Recognition, IET Computer Vision, Frontiers in Computer Image Analysis, Brain Informatics, and serves on the Advisory Board of the International Journal of Machine Learning and Cybernetics. Prof. Pelillo has been elected a Fellow of the IEEE and a Fellow of the IAPR, and has recently been appointed IEEE SMC Distinguished Lecturer.