

ARTIFICIAL INTELLIGENCE

MUR DM 118 - Continual Learning in Industrial Applications

Funded By	UNIVERSITA' DEGLI STUDI DI VERONA [P.iva/CF:01541040232] MINISTERO DELL'UNIVERSITA' E DELLA RICERCA [P.iva/CF:97429780584]
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Context of the research activity	Application of Continual Learning in Industrial Applications. Progetto finanziato nell'ambito del PNRR – DM 118/2023 - E14D23001820006
Objectives	To cope with the highly dynamic nature of the world, intelligent agents need to continually acquire, process, update, adapt, and exploit knowledge throughout their lifetime. While humans can incrementally learn from experience, machines are often subject to catastrophic forgetting, where learning new tasks results in a dramatic drop in the old tasks. This project aims to build artificial agents able to construct a sophisticated understanding of the world from their own experience through the incremental development of complex knowledge and skills.
Skills and competencies for the development of the activity	The candidate should have a good knowledge of machine learning and deep learning, with a preference for unsupervised and weakly supervised techniques applied to computer vision and time series analysis tasks. A good knowledge of statistical methods for data analysis, model interpretability and anomaly detection are required.