ARTIFICIAL INTELLIGENCE

MUR DM 118 - Autonomous navigation of mobile robots to operate in barns and to monitor animal health

Funded By	MINISTERO DELL'UNIVERSITA' E DELLA RICERCA [P.iva/CF:97429780584] POLITECNICO DI MILANO [P.iva/CF:04376620151]
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Context of the research activity	Development of deep learning techniques for the autonomous navigation of mobile robots. Progetto finanziato nell'ambito del PNRR – DM 118/2023 - CUP E14D23001810006
Objectives	The goal of the research will be the development of deep learning techniques for the autonomous navigation of mobile robots in barns, in order not only to avoid obstacles and animals but also to guarantee the psychological comfort of the animals during operations. Deep learning techniques will therefore be applied not only for mapping the environment but also for estimating the animal's intentions. The operations envisaged are the monitoring of the animal's health, foraging and barn cleaning.
Skills and competencies for the development of the activity	The candidate must have a Master's Degree in Industrial and/or Information Engineering and must have skills in robotics, automation, and artificial intelligence.