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The AI Journey: The road traveled and the (long) road ahead

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In this talk I will first briefly remind what Artificial Intelligence (AI) is about, distinguishing between strong and weak AI. Then I will summarize some of the many impressive results we have achieved in weak AI along the road traveled so far, including some specific results in robotics and music obtained at the IIIA-CSIC. Next I will describe some of the future challenges to be faced along the (long) road we still have ahead of us, with an emphasis on the so-called "integrated systems" incorporating perception, learning, reasoning, communication and action and why the Turing test is not suitable for such systems. Finally, I will comment on the importance of interdisciplinary research for building these integrated systems, which are a stepping stone towards strong AI, and give some examples of results in interdisciplinary research which are relevant for building humanoid robots with artificial skin, artificial muscles, and artificial cartilages.

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