ARTIFICIAL INTELLIGENCE AND HPC SEMINAR

ABSTRACT

Artificial Intelligence (AI) has become a topic of extreme importance, both from the industrial and research sides. Computers and so-called intelligent devices are now pervasive in our daily life and technical tasks. Basically, Artificial Intelligence aims at enabling computers to perform such intellectual tasks as decision-making, problem-solving, perception/identification, «understanding» human communication, modeling human behavior so as to be able to predict needs and actions, and the like.

I define (pure) intelligence as the ability to mentally get into something you never learned. The fundamental difference with AI is the nondeterminism of the first and the determinism of the second, even if it is schematically perceived as a way to mimic the human brain through computer programs. A reference illustration of this duality is the blind test suggested by Alan Turing in 1950: if an observer fails in identifying the computer from its interaction with a human in a given delay, then the machine has succeeded.

Current and future expectations from AI are very challenging, and significant advances have been made in the topic. Powerful AI methods (e.g., Deep Learning) and large-scale datasets (e.g., massive networks) processing are computationally expensive, hence the need for high-performance computing. This talk will illustrate the fact and provide some technical insights related to high-performance AI.

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BIOGRAPHY

Claude Tadonki (M) is a senior researcher and lecturer at the MINES ParisTech Institute (Paris/France) since 2011. He holds a PhD and an HDR in computer science from University of Rennes and from Paris-Sud University respectively . After six years of cutting-edge research in operational research and theoretical computer science at the University of Geneva, he relocated to France to work for EMBL, University of Paris-Sud, LAL-CNRS and then MINES ParisTech. His main research topics included High Performance Computing, Parallel Computing, Operational Research, Matrix Computation, Combinatorial Algorithm and Complexity, Mathematical Programming, Scientific and Technical Programming, Automatic Code Transformations. Claude Tadonki has worked at several laboratories and universities, has initiated various scientific projects and national/international collaborations, has given significant number of CS courses in different contexts including industries. He is an active member of well established scientific corporations and reviewer of high-impact international journals and top-rank conferences. He has published numerous papers in journals and international conferences.He is very active in international collaborations and has co-organized several HPC conferences and forums.
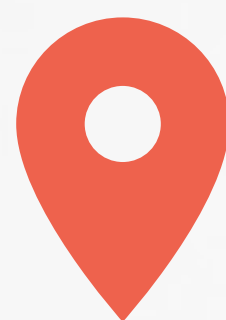
7th February

Start 11:00 Am

Grand Amphi, Ensias
Rabat, Morocco