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INSPEM WEEKLY SEMINAR

Date & Time
21st December 2018, Friday @ 3.15 pm

Venue
Al-Farabi Seminar Room, Second Floor, INSPEM

Presenter
Dr. Seyedali Ahmadian Hosseini

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Laboratory of Computational Sciences and Mathematical Physics**

Topic

A Brief Introduction to Machine Learning : Knowledge for Future

Abstract

Machine learning is programming computers to optimize a performance criterion using example data or past experience. We need learning in cases where we cannot directly write a computer program to solve a given problem, but need example data or experience. One case where learning is necessary is when human expertise does not exist, or when humans are unable to explain their expertise. There are many successful applications of machine learning in various domains: There are commercially available systems for recognizing speech and handwriting. Retail companies analyze their past sales data to learn their customers' behavior to improve customer relationship management. Financial institutions analyze past transactions to predict customers' credit risks. Robots learn to optimize their behavior to complete a task using minimum resources. In bioinformatics, the huge amount of data can only be analyzed and knowledge extracted using computers. These are only some of the applications that we aim to briefly introduce them in this talk. We can only imagine what near future applications can be realized using machine learning: Cars that can drive themselves under different road and weather conditions, autonomous robots that can navigate in a new environment, for example, on the surface of another planet. Machine learning is certainly an exciting field to be working in.