

ARTIFICIAL INTELLIGENCE

Artificial Intelligence (AI) refers a kind of intelligence that enables machines to emulate intelligent behavior or to do things that people mostly do better. AI technologies have an important impact on our daily activities in business, as individuals, and as a society. During this course, apart from learning about AI fundamentals and applications, you will use specific techniques about different areas of AI such as knowledge representation and machine learning.

➤ **ECTS credits: 1**

➤ **Dates: 5 to 9 July 2021**

Meet Our

INSTRUCTORS



Prof. Asunción Gómez-Pérez is full professor of Artificial Intelligence. She is Fellow of the European Academy of Science (2018). She received the ARITMEL Award - National Prize of Computer Science 2015, the UPM Annual Research Award (2015) and the 2nd National Ada Byron Prize for Woman in Technology (2015). She leads the Ontology Engineering Group. She is Vice-Rector for Research, Innovation and Doctoral Studies at Universidad Politécnica de Madrid. Her research areas include: Ontological Engineering, Semantic Web, Linked Data, and Multilingualism in Information and Knowledge Management.



Dr. María Poveda-Villalón is an Assistant Professor at the Universidad Politécnica de Madrid Ontology Engineering Group. Her research areas include Ontological Engineering, Knowledge Representation and the Semantic Web. She has worked in the context of more than ten Spanish and European research projects. She has co-organized a number of events like the Linked Data in Architecture and Construction Workshop since 2015 and workshops and tutorials in the Semantic Web field. She designed and developed OOPSI, an on-line system for evaluating ontologies that has been adopted world-wide and has been used from more than 60 countries and more than 6000 times.



Alfonso Tamés is the Accenture Managing Director leading Europe Blockchain practice and technology innovation for Spain, Portugal and Israel. He also collaborates as the UPM/Accenture AI Innovation Space Deputy Director and IE International MBA Blockchain TechLab Mentor. Mr. Tamés began his consultancy career in Accenture in 2003. Over the last 15 years, he has provided technology advisory and project/program management and execution services to some of the leading international companies in financial services, retail, travel and transportation, hotel brands and pharma markets, spending more than six years on overseas collaborations around Europe, USA and Southeast Asia.



Emilio Serrano is an associate professor at the Department of Artificial Intelligence at the Universidad Politécnica de Madrid, lecturing in Deep Learning and Data Mining. He holds an MSc in Computer Science and a PhD in Artificial Intelligence, both from the University of Murcia. He was a visiting researcher at the University of Edinburgh, University of Oxford, and National Institute of Informatics in Tokyo. He was principal investigator in two educational innovation projects in Data Science and has also participated in several European and nationally funded programs including the FP7 research projects (smartopendata, eurosentiment, and omelette) and H2020 research projects (slidewiki and AI4EU).

LEARNING GOALS

■ Acquire

Theoretical bases
Scientific, methodological and technological practices



Development of machine learning systems and the Semantic Web

■ Understand

Concepts



Machine learning systems

Semantic Web

Web of Data

Open data

Ontology representation languages on the Web

SYLLABUS

MODULE 01

- Introduction to Artificial Intelligence, including the industrial and legal, social and ethics impact of Artificial Intelligence
- Fundamentals of Machine Learning
- Current technologies and trends In Ontological Engineering
- Linked Data

MODULE 02

Laboratory: practical assignment

MODULE 03

Industry talk: Intelligent Enterprise Unleashed