

## Programa del curso

### Semestre 2021-18



Nombre del curso:	Reinforcement Learning
Créditos:	4
Profesor:	Ivana Dusparic Nicolas Cardozo Alvarez
Horario:	15 de Junio al 26 de Junio
	(M,I,J,V) 12:30-17:15
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## Descripción

In recent years Reinforcement Learning (RL) has resurfaced as one of the main drivers for AI, and in general decision making automation. RL is a powerful programming technique to enable long-term learning of software systems, being applicable to many different domains including robotics, software generation, testing, game playing, healthcare, and personalized assistants. In this course students will obtain theoretical and practical knowledge in underlying principles of RL, Markov decision processes, classic RL algorithms, and deep reinforcement learning. The course will also introduce current hot topics in advanced RL, such as transfer learning, multi objective learning, and explainability [tab title="Profesores"]

**Ivana Dusparic** is an Ussher Assistant Professor in Future Cities and the Internet of Things in the School of Computer Science and Statistics at Trinity College Dublin. She works on our ENABLE smart cities research programme. Her research interests lie in the use of Artificial Intelligence (machine learning, intelligent agents and multi-agent

systems) to achieve autonomous optimization of large-scale heterogeneous infrastructures, with particular focus on smart cities applications and sustainable urban mobility.

**Nicolás Cardozo** is an Assistant Professor at Universidad de los Andes. He specializes in the design and implementation of programming languages for distributed and adaptive software systems. Nicolás has worked in the implementation of dynamic distributed adaptations in the domain of smart cities from different perspectives, such as automated personalized assistants and evolutionary models for dynamic adaptations. He is the research lead at the FLAG research lab, focusing on the foundations, programming languages, artificial intelligence, and algorithms of computer science.