

## FAIaS – Fostering Artificial Intelligence at Schools

Multiplier event #1

26th of November 2021

Braga

“For a better understanding of what Artificial Intelligence is and how it can be used (or misused) in education and training”

Context :

In the last 10 years, Artificial Intelligence (AI) has been transforming the economy, our work, and pastimes in visible and invisible ways. And, we will increasingly be supported by and interact with technology that is powered by Artificial Intelligence. It is important to realize that not only technical careers will be impacted by this evolution, but almost every profession, ranging from historians, marketeers, healthcare workers to teachers will be changing.

Every day, new AI platforms are being developed to support students and teachers tasks, but we are so busy with our daily tasks that we do not have time, or do not make time free to learn about those new trends. That is why the Erasmus+ project FAIaS (Fostering AI at Schools) has been launched, to bridge that knowledge gap and make it easy for the educational sector (schools, teachers, students and policy makers) to understand AI. The goal of FAIaS is to create easy content for teachers and students to learn about AI: learn what it is, where it is implemented, how to use it, how to create it, and also understand the positive and negative ways in which AI can impact our lives.

Program:

9:00 Registration and networking moment

10:00 Welcome and Opening remarks, Joana Miranda [Executive Director of Braga, Unesco Creative City in Media Arts]

10:15 Keynote Paulo Novais " Artificial Intelligence and Educational Challenges: Fundamental Concepts, Present and Future Applications".

Paulo Novais

[Full Professor at the Department of Informatics and researcher at the ALGORITMI Centre, School of Engineering, University of Minho]

10:45 Presentation of the FAIaS project - Fostering Artificial Intelligence at Schools//programme and expected outcomes

Gregorio Robles - Universidad Rey Juan Carlos [Coordinating partner of FAIaS) Full Professor at Universidad Rey Juan Carlos].

11:15 Coffee break

11:45 "An Artificial Intelligence centered on trust"

Vitor Carvalho [ Professor and Researcher at IPCA //Member of the Commission's Expert Group on Artificial Intelligence and Data in Education and Training at the European Commission]

Maria Manuel Leitão Marques [Member of the European Parliament and Member of the Special Committee on Artificial Intelligence in the Digital Age AIDA] \*online

Liliana Carrillo [Founding Director of CollectiveUP, co-founder of the European Digital Development Alliance and co-founder of Shine Your Light ]

Joana Miranda [Executive Director of Braga, Unesco Creative City in Media Arts]

13:00 Lunch

14:30 workshops

(NOTE: each participant must register for two workshops)

## **Description of the workshops**

### **Workshop 1**

Title: In a Reinforcement Learner agent's shoes

Who : Marjon Blondeel Vrije Universiteit Brussel

Description:

Reinforcement Learning is currently one of the most popular subfields of Artificial Intelligence. It is sometimes called the science of decision making and it is the driving force behind autonomous vehicles. In essence a self-driving car learns how

to drive on its own by trial and error using feedback following its own actions, just like we humans learn how to ride a bike. In this workshop we will take away some of the mystery behind the technique and also learn a task ourselves using Reinforcement Learning.

Marjon holds a Masters degree in Mathematics from the Vrije Universiteit Brussel (2009) and obtained a joint PhD in Artificial Intelligence from the Vrije Universiteit Brussel and the University of Ghent (2014). Since 2020 she works as an AI engineer at the Artificial Intelligence Lab of the Vrije Universiteit Brussel.

She design and develop tools, systems and processes that enable the application of AI in real world problems. She is also a developer of training material and a trainer for LAIKA – Lifelong Learning Program and part of the team that runs the AI Experience Centre.

## **Workshop 2**

Title: Discovering our unconscious bias

Who: Liliana Carrillo, CollectiveUP

Description:

Our experiences, and who we are, shape the way we see the world and these influence the decisions we make. Each person has a somewhat different view of the world, and each person has some tendencies, inclinations or prejudice towards/against something or someone, and that is called bias.

We are all (unconsciously) biased! Some biases are positive and helpful as they keep us safe, but some others are based on stereotypes and can lead us to discriminatory practices. No worries! we are here to learn. This workshop explains what implicit bias is, why we are biased, how it is different from overt bias, how to recognize our own bias, and get some tips to overcome your bias.

Liliana Carrillo is a Social Digital Entrepreneur and Researcher with a passion for inclusion and diversity.

Founding Director at CollectiveUP, co-founder at the European Digital Development Alliance and co-founder at Shine Your Light. 3 Masters: computer science engineer, MBA, Advanced AI studies.

## **Workshop 3**

Title: LearningML

Who: Luisa Yáñez, Universidad Rey Juan Carlos

Description: LearningML is a web platform aimed at using supervised machine learning, one of the most successful AI techniques that is at the base of almost all current AI applications, in education. It has been designed with a low-floor idea, that allows users to use it even with minor knowledge of computers and AI, in general. It offers the possibility to classify texts, images and sounds. And for the most advanced users, you can integrate the machine learning models they create into their Scratch programs easily.

Luisa Yáñez is a Telecommunications engineer and She is studying a Master in Data Science. She is working on research helper at the university of Rey Juan Carlos. She really likes topics about Machine learning and AI

## **Workshop 4**

Title: Moral Machine

Who: Gregorio Robles Universidade Rey Juan Carlos Madrid

Description: Moral Machine is an online platform, developed at the Massachusetts Institute of Technology, that generates moral dilemmas and collects information on the decisions that people make between two destructive outcomes. The presented scenarios are often variations of the trolley problem, and the information collected would be used for further research regarding the decisions that machine intelligence must make in the future. For example, as artificial intelligence plays an increasingly significant role in autonomous driving technology, research projects like Moral Machine help to find solutions for challenging life-and-death decisions that will face self-driving vehicles.

Gregorio Robles is a Full Professor at the Rey Juan Carlos University in Madrid. His PhD was focused on the study of Free/Open Source Software from an empirical point of view, exploring its public repositories. Recently, he has been focusing on the area of computational thinking development. He has co-authored several evaluation tools, such as Dr. Scratch.

17:30 End of the event, Ricardo Rio [Braga's Mayor]