

# Fostering Artificial Intelligence @ School

## Erasmus+ Project

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Braga, 30 May 2022



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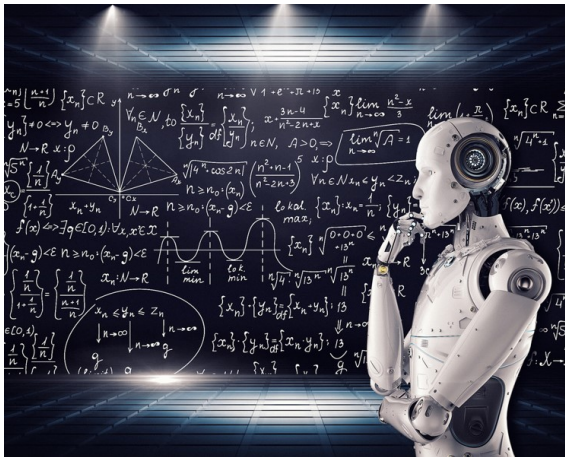


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<http://fosteringai.net>



# Why?




Artificial Intelligence at Schools?

# UNESCO Report




 UNESCO

ESPAÑOL ▾  



## Los retos y las posibilidades de la Inteligencia Artificial en la educación

07/03/2019 4 min

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The challenges and opportunities of Artificial Intelligence in education

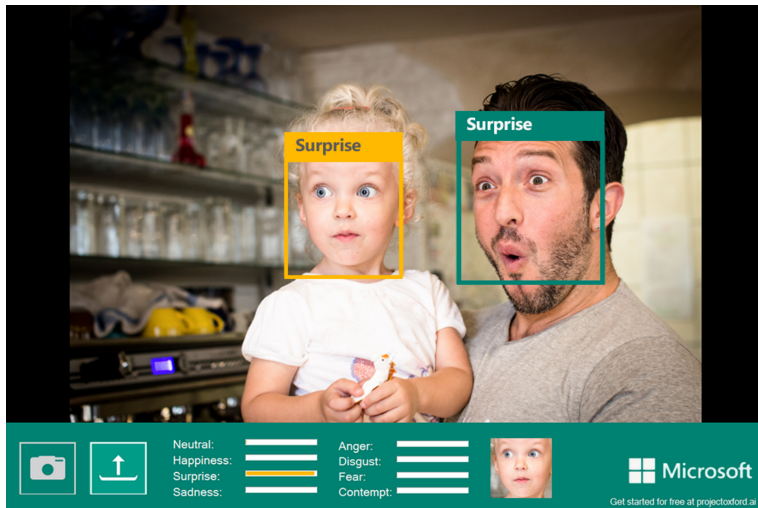
# Challenges and Possibilities of AI in Education

- 1 Develop a comprehensive vision of public policies on AI at the service of sustainable development
- 2 Ensure equitable and inclusive use of AI in education
- 3 **Prepare teachers for AI-led education**
- 4 Develop inclusive and quality data systems
- 5 Strengthen research on AI in education

# Preparing Teachers for AI-led Education

- ① **Understand** how AI can facilitate learning
- ② Develop **skills** of research and data analysis
- ③ (Develop HR and AI management skills)
- ④ Obtain a **critical perspective** on AI
- ⑤ Leverage AI for repetitive tasks and incorporate more **human capabilities**
- ⑥ Help students acquire skills and competencies that **are not replaced by machines**

# Emotion detection



The screenshot displays the Microsoft Project Oxford Emotion API interface. The main image shows a man and a young child in a kitchen setting. Both are framed by colored boxes with the label "Surprise" above them. The man's box is teal, and the child's box is yellow. Below the image, a teal bar contains a control panel with icons for camera and upload, and a list of emotion categories with corresponding progress bars. The categories and their levels are: Neutral (empty), Happiness (empty), Surprise (filled yellow), Sadness (empty), Anger (empty), Disgust (empty), Fear (empty), and Contempt (empty). A small thumbnail of the child's face is shown next to the emotion levels. The Microsoft logo and the text "Get started for free at projectoxford.ai" are in the bottom right corner.

Emotion	Level
Neutral	Empty
Happiness	Empty
Surprise	Filled (Yellow)
Sadness	Empty
Anger	Empty
Disgust	Empty
Fear	Empty
Contempt	Empty

Microsoft  
Get started for free at [projectoxford.ai](https://projectoxford.ai)

## Emotion detection

# But they are sometimes wrong

## Fake Smile Game

Display each of the six basic emotions shown below.

Move your face to fake emotions.

Can you make the emotion recognition system read you as happy, sad and angry?

Can you beat the machine?

Happiness

Sadness

Fear

Surprise

Disgust

Anger



0.84

neutral (0.73)  
surprised (0.18)

FINISH GAME ✓

ABOUT

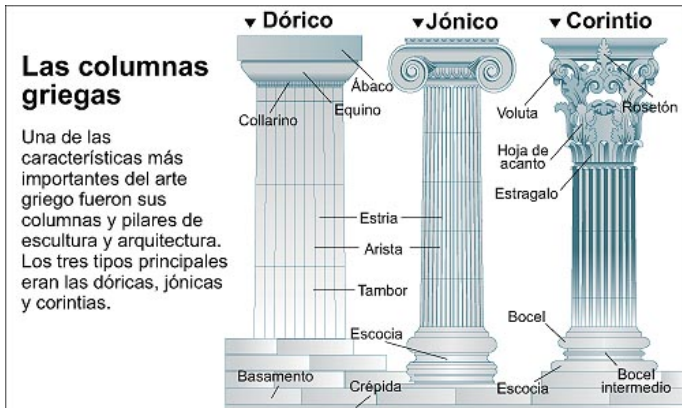
CREATED BY , SUPPORTED BY 

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Can you fool the machine? <https://emojify.info/activity-2>



# Artificial Intelligence in the Classroom: Example 1



Looking for patterns in a History lesson

# Artificial Intelligence in the Classroom: Example 2

## TIPOS DE ÁRBOLES



Looking for patterns in a Biology lesson

# Artificial Intelligence at School

FAIAS

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## Fostering Artificial Intelligence at Schools

Artificial Intelligence [AI] is believed to be a key driver of the 4th industrial revolution that will transform the economy and reinvent the nature of our work. We will increasingly be supported by and interact with technology that is powered by Artificial Intelligence. This calls for an education that prepares us for this future.

FAIAS intends to hone the skills, both hard cognitive and soft skills, required to understand, build or interact with Artificial Intelligence. We thus consider AI, not in the narrow, purely technological sense, but in the broad sense, as it impacts many different parts of our lives. We, therefore, choose decisively for an interdisciplinary and inclusive approach that focuses not only on STEM activities but involves all school subjects and covers a broad range of aspects, including the ethical,

<http://fosteringai.net>

# Important Places

- ① Meeting place: gnration. Praça Conde de Agrolongo
- ② Breakfast: Doce Carmo. R. do Carmo
- ③ Lunches: Mostarda e Chocolate. Praça Conde de Agrolongo
- ④ Dinners (Tuesday and Thursday): Atravessado. R. de Santo António das Travessas 30
- ⑤ Banquet (Wednesday): Bem-me-quer. Campo das Hortas, 6

# Important Places

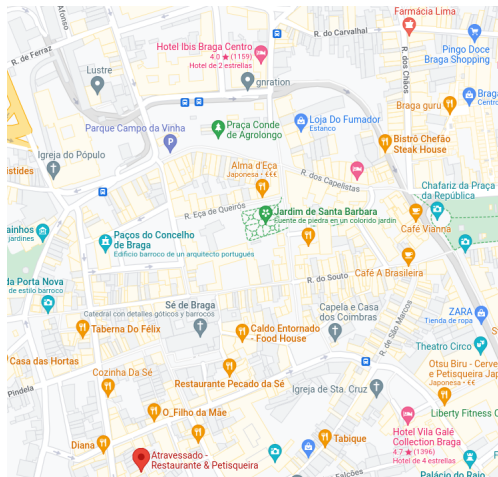


Figure: Braga map

# Tuesday, May 31 2022

- **16:00 Welcome** (and activity)
- **17:30 Talks by participants**
  - “Machine Learning in Education” by Pablo Dúo Terrón
  - “Overview of AI activities developed by la Scientotheque” by Yann-Aël Le Borgne
  - “The use of filters in a deep neural network for image recognition” by Natacha Gesquière
- **19:00 End**
- **20:00 Dinner**

# Wednesday, June 1 2022

- **09:30 Breakfast**
- **10:00 Intro to AI**
- **13:00 Lunch**
- **15:00 Talks by participants II**
  - “AI Generation” by Maria Inmaculada Caruana
  - “XR in education” by Peter De Deyn
  - “Problem solving with Machine Learning and Scratch” by Álvaro Molina
- **16:15 LearningML**
- **17:30 Guided visit through Braga**
- **19:00 End**
- **20:00 Banquet**

# Thursday, June 2 2022

- **09:30 Breakfast**
- **10:00 Example lessons**
- **13:00 Lunch**
- **15:00 Preparation:** Create your lesson
- **17:00 Presentations**
- **17:30 End**
- **20:00 Dinner**



# Friday, June 3 2022

- **09:30 Breakfast**
- **10:00 Presentation time**
- **12:00 Reflection and discussion time**
- **13:00 Lunch and farewell**

# Next

## Know the Participants

# Fostering Artificial Intelligence @ School

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