

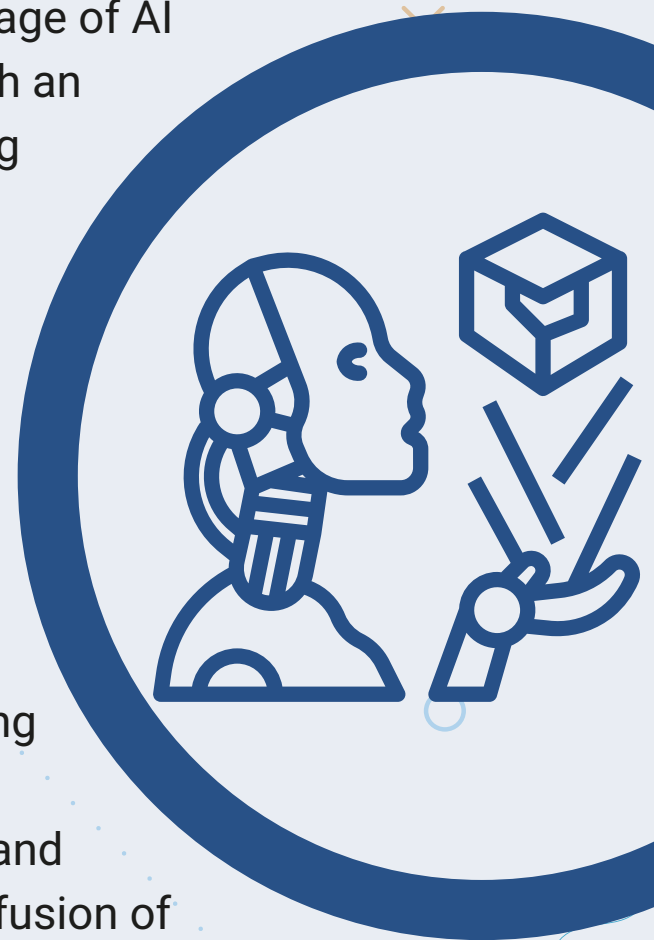
ENGLISH CODE ARTIFICIAL INTELLIGENCE

INNOVATOR - Module 1



Contextualization of my learning

Throughout this course, you will immerse yourself in the intricate language of AI while honing your reading, and writing skills. The exploration begins with an in-depth analysis of ethical considerations in AI development, unraveling various frameworks, and evaluating their efficacy in addressing ethical concerns. You will gain a solid foundation in expressing and comprehending these crucial concepts in technical English. Learners will navigate ethical landscapes by examining diverse frameworks in AI development, explore computer vision terminology encompassing object detection and convolutional neural networks, and delve into reinforcement learning concepts with a focus on policy optimization, and practical applications. Also, students will engage with case studies in gaming, robotics, and decision-making, and stay current with emerging trends like augmented reality, edge computing, and explainable AI in computer vision. This course culminates in discussions on challenges and solutions in reinforcement learning projects, offering a comprehensive fusion of language proficiency, and AI knowledge.



General objective

UNIT 1

- Enhance participants' technical English proficiency, focusing on ethical considerations in AI, key computer vision terminology and reinforcement learning concepts.
- Develop the language skills necessary for effective communication and understanding of AI-related case studies, emerging trends and challenges.

Competences to be developed

- Vocabulary.
- Reading.
- Writing.
- Discussion and Collaboration.

Technical Vocabulary Acquisition: develop a rich vocabulary in technical terms related to AI, including ethical frameworks, computer vision, and reinforcement learning concepts.

Reading Comprehension: enhance the ability to understand, and extract information from complex articles, case studies and technical documents related to AI.

Writing Proficiency: improve the skill to articulate thoughts, concepts, and solutions coherently and precisely in written form with a focus on technical documentation and reports.

Discussion and Collaboration: develop the ability to actively participate in discussions, both written and verbal, on topics related to AI ethics, technologies and challenges.

Activation of previous knowledge

Execution time: 4 hours

APPROACH OF THE SESSION

Objetivo de la sesión:

Activar los conocimientos previos de los participantes en relación con los conceptos fundamentales del Aprendizaje Automático, preparándolos para el módulo en el que abordará el Aprendizaje Automático en profundidad.

Introducción:

- Bienvenida y contextualización del módulo de aprendizaje automático.
- Breve revisión de la importancia del Aprendizaje Automático en la actualidad.

Dinámica de preguntas y respuestas:

- Invitar a los participantes a compartir sus conocimientos previos sobre aprendizaje automático.
- Realizar preguntas abiertas para explorar definiciones y ejemplos relacionados con Aprendizaje Automático.

Conceptos de aprendizaje automático

- Desarrollar una sesión interactiva para definir y discutir los conceptos básicos de aprendizaje automático.
- Solicitar a los participantes que proporcionen ejemplos de situaciones cotidianas donde se aplican conceptos de Aprendizaje Automático.

Aprendizaje Automático Supervisado:

- Profundizar en el Aprendizaje Automático Supervisado, destacando cómo funciona y en qué situaciones se aplica.
- Realizar ejercicios prácticos donde los participantes identifiquen ejemplos de aprendizaje supervisado en su entorno.

MATERIALS

Reading: What is object detection?

Video: Object detection explained <https://www.youtube.com/watch?v=MyvOfDFZvgE>

Reading: "Image segmentation: a comprehensive guide."

Video: "What is a convolutional neural network (CNN)?" <https://www.youtube.com/watch?v=QzY57FaENXg>

Kahoot: <https://create.kahoot.it/details/5319a0db-c003-4492-90bc-f6325d5a4bc0>



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