TIC

ENGLISH CODE ARTIFICAL INTELLIGENCE

INTEGRATOR- Module 1

Universidad Tecnológica de Pereira

faceIT

CONTEXTUALIZATION OF MY LEARNING

In this Integrator module, students will delve into Natural Language Processing (NLP), and its applications to enrich AI-related reading, and writing skills. The focus includes understanding challenges like ambiguity and bias in NLP, and building a robust vocabulary with terms such as tokenization and part-of-speech tagging. Exploring deep learning in NLP, students will grasp concepts like word embeddings and recurrent neural networks. By the end of the course, they'll adeptly navigate the lexicon associated with neural network architectures, and layers in language processing, ensuring a comprehensive understanding of NLP within the AI context.

General objective

UNIT 1

- Gain a deep understanding of Natural Language Processing (NLP) principles, and applications, fostering advanced reading, and writing capabilities within the AI domain.
- Acquire proficiency in addressing challenges like ambiguity, and bias inherent in NLP, ensuring the ability to navigate complexities in language processing.
- Build an ample vocabulary specific to NLP applications in the industry, including key terms such as tokenization, stemming, part-of-speech tagging, and concepts related to deep learning within the NLP context.

SKILLS TO DEVELOP

-Linguistic competence.

-Pragmatic competence.

-Sociolinguistic competence.

-Topical Competence.

Linguistic competence: Develop proficiency in the language of Natural Language Processing (NLP), encompassing the ability to understand, and use key terms, techniques, and concepts effectively within the AI context.

Pragmatic competence: Acquire practical skills in applying NLP principles, demonstrating the ability to use language appropriately in real-world AI application,s and scenarios.

Sociolinguistic competence: Understand the social implications, and considerations within the realm of NLP, exploring how language choices and applications impact various societal aspects, including bias and ethical considerations.

Topical Competence: Attain a comprehensive grasp of the topical knowledge in NLP, covering industry-relevant vocabulary, challenges, and advanced concepts such as deep learning within the NLP context.

UNIT 1: FUNDAMENTALS OF AI

Execution time: 4 hours.

APPROACH OF THE SESSION	MATERIALS
1) Socialize the technology idiom of the day. 2) Discuss questions about NLP. 3) Explain what the scanning strategy is. 4) Socialize key words about: Natural Language Processing (NLP). 5) Reading comprehension: "Introduction to Natural Language Processing (NLP)." 6) Multiple choice activity. 7) Before the reading activity, explain the inference reading strategy. 8) Socialize key words about: "X." 9) Reading comprehension: "The Evolution of NLP: Past, Present, and Future." 10) Multiple choice inference activity. 11) Socialize key words about "Beyond Siri: The Evolution of Natural Language Processing in AI." 12) Reading comprehension: "Beyond Siri: The Evolution of Natural Language Processing in AI." 13) True/False activity.	- Reading: An Introduction to Natural Language Processing (NLP) | Built In: https://builtin.com/data-science/introduction-nlp - Reading "The Evolution of NLP: Past, Present, and Future": - Reading: Beyond Siri: The Evolution of Natural Language Processing in AI (ironhack.com): https://www.ironhack.com/gb/blog/beyond-siri-the-evolution-of-natural-language-processing-in-ai

UNIT 1: FUNDAMENTALS OF AI

Execution time: 4 hours.	
APPROACH OF THE SESSION	MATERIALS
13) True/False activity. 14) Fill in the blank activity. 15) Socialize key words about: "Computational linguistics (CL)." 16) Reading comprehension: "Computational linguistics (CL)." 17) Kahoot activity.	