

ENGLISH CODE ARTIFICAL INTELLIGENCE

INTEGRATOR-Module 1

Unit 6





General objective

UNIT 6

To deepen students' understanding of natural language processing (NLP) challenges, including issues
of ambiguity and bias, and to explore emerging concepts in AI research. Develop the language skills and
knowledge necessary to navigate and contribute meaningfully to the evolving landscape of AI, fostering
critical analysis and awareness of ethical considerations in the field.

SKILLS TO DEVELOP

- Linguistic competence.
- Pragmatic competence.
- Sociolinguistic competence.
- Topical Competence.

- **Linguistic Competence:** Develop proficiency in the specialized language and terminology associated with natural language processing (NLP) and emerging concepts in AI research. Enhance skills in reading, interpreting, and producing texts related to challenges like ambiguity and bias in NLP.
- Pragmatic Competence: Acquire the ability to apply theoretical knowledge of NLP challenges and AI research concepts in practical situations. Develop pragmatic skills in identifying and addressing linguistic ambiguities and biases within the context of AI applications.
- **Socialinguistic Competence:** Understand the societal implications of NLP challenges and emerging AI concepts. Explore how language technologies impact various social contexts, considering issues such as inclusivity, fairness, and the ethical use of AI in different communities.
- **Topical Competence:** Gain in-depth knowledge of key topics in the field of NLP, including challenges related to ambiguity and bias, as well as staying informed about the latest developments and trends in AI research. Develop the ability to critically analyze and discuss the ethical dimensions of AI technologies in diverse contexts.







CONTEXTUALIZATION OF MY LEARNING

This module delves into the intricacies of natural language processing (NLP) and emerging concepts in AI research, focusing on terms that address challenges such as ambiguity and bias. Students will explore the evolving landscape of AI, gaining a deeper understanding of how language models navigate the complexities of human communication. The module aims to enhance linguistic competence by introducing vocabulary specific to the challenges encountered in NLP, fostering pragmatic competence through discussions on bias mitigation techniques, and promoting sociolinguistic competence by examining the societal implications of AI advancements. As part of the topical competence, students will engage with cutting-edge AI research, unraveling the complexities of ambiguity and bias within the context of language processing. The overarching goal is to equip students with the language skills and knowledge needed to critically analyze and contribute to the evolving field of AI research.

 $n \ge n_0: (x_n - q) < \epsilon$







UNIT 6: Terms discussing challenges like ambiguity and bias in NLP, and emerging concepts in Al research

Execution time: 4 hours.

APPROACH OF THE SESSION

MATERIALS

1)Hangman game. 2)Keywords socialization. <u>3)Reading</u> comprehension: "Ambiguity in NLP" 4)True/False activity. 5)Fill in the blank vocabulary activity. 6)Discussion questions about READING #2 7)Reading comprehension: "The Art of Understanding Linguistic Ambiguity: NLP's Greatest Challenge" 8)Multiple choice activity reading #2. 9)Socialization of vocabulary reading activity #3 10)Reading activity #3: "AI in 2023: Emerging Trends and Future Possibilities" 11)Multiple choice activity.

- Reading: "Ambiguity in NLP": <u>https://jrodthoughts.mediu</u> <u>m.com/ambiguity-in-</u> <u>natural-language-</u> <u>processing-15f3e4706a9a</u>
- Reading: "The Art of Understanding Linguistic Ambiguity: NLP's Greatest Challenge": <u>https://dezzai.com/en/blog/</u><u>understanding-linguistic-</u> <u>ambiguity-impact-chat-</u> <u>gpt/</u>
- Reading #3: "Al in 2023: Emerging Trends and Future Possibilities": <u>https://www.linkedin.com/p</u> <u>ulse/ai-2023-emerging-</u> <u>trends-future-</u> <u>possibilities-dave-</u> <u>balroop-z9uec</u>



UNIT 6: Terms discussing challenges like ambiguity and bias in NLP, and emerging concepts in Al research



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APPROACH OF THE SESSION	MATERIALS
12)Socialization vocabulary reading activity #4 13)Reading activity #4: "Quantum Artificial Intelligence Is Closer Than You Think" 14)Matching heading definition 15)True/False activity.	Reading #4: "Quantum Artificial Intelligence Is Closer Than You Think": <u>https://www.forbes.com/sites/jonathanreichental/2023/11/20/ quantum-artificial- intelligence-is-closer-than- you-think/?sh=6a5f91c48182</u>



