

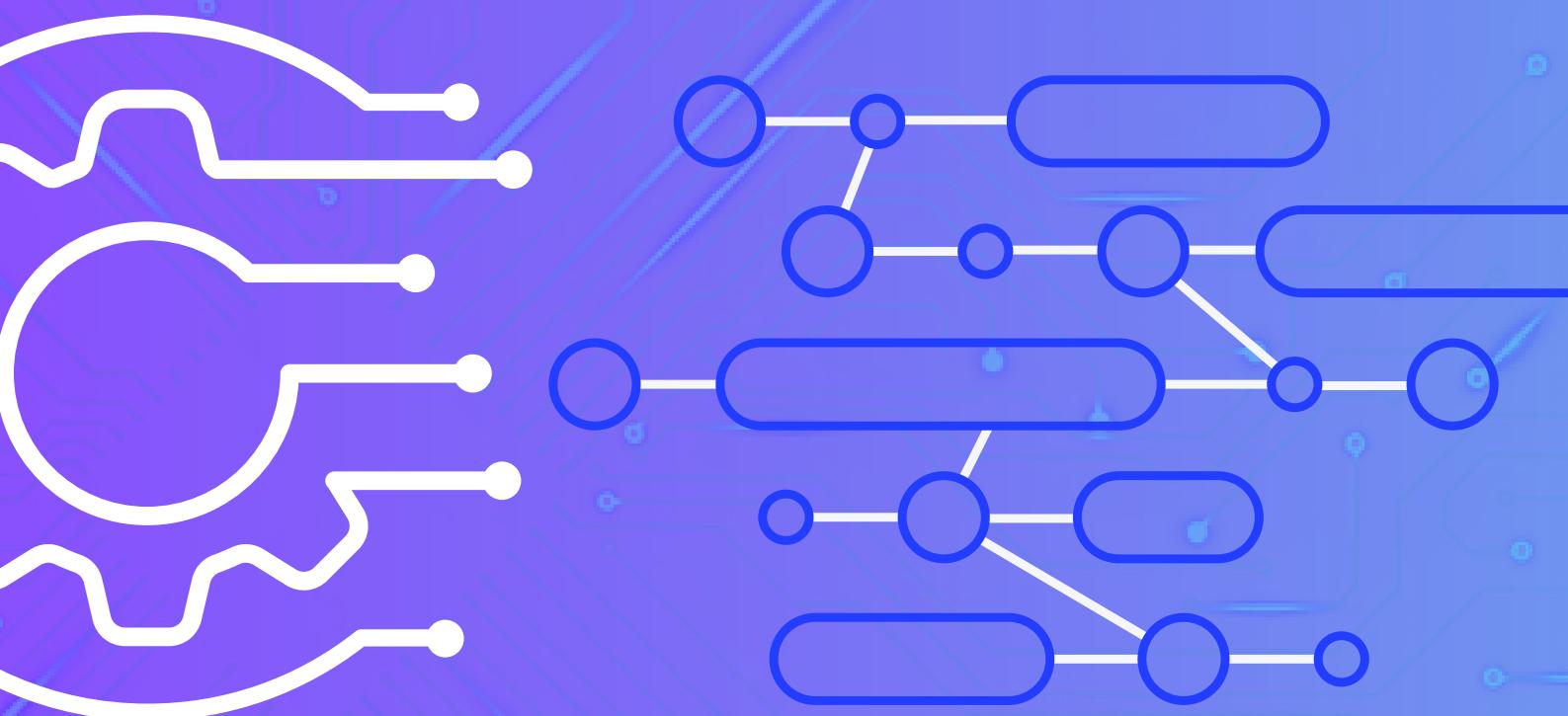
MÁSTER EN LINGÜÍSTICA INGLESA:
NUEVAS APLICACIONES Y
COMUNICACIÓN INTERNACIONAL



INTRODUCTION TO **NATURAL LANGUAGE PROCESSING**



Ana Laguna Pradas
Data Scientist



7 November 2023
18:00 h - 20:00h

Laboratorio 001
Edificio A
Facultad de Filología

MÁSTER EN LINGÜÍSTICA INGLESA:
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NLP STATE OF THE ART: THE BIG REVOLUTION

Ana Laguna Pradas
Data Scientist

8 November 2023
18:00 h - 20:00h

Laboratorio 001
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MÁSTER UNIVERSITARIO EN LINGÜÍSTICA INGLESA: NUEVAS APLICACIONES Y COMUNICACIÓN INTERNACIONAL

Invited speaker: Ana Laguna Pradas

Data Scientist

These masterclasses will provide a comprehensive introduction to Natural Language Processing, covering fundamental concepts, levels of analysis, and document representation in the first session. The second session will explore the cutting-edge advancements in NLP, including deep learning and its transformative impact on various applications. Participants will gain valuable insights into the world of NLP and its evolving state of the art being able to work on several use cases.

Requirements: Google colab in Google Drive and HuggingFace account.

Masterclass 1: Introduction to Natural Language Processing (NLP)

Tuesday, November 7th, 2023, 18:00-20:00h

Contents

- What is NLP? Examples
- Levels of NLP: tokenization, morphological analysis (POS, lemmatization, NER), syntactic analysis, semantic analysis, pragmatics
- Document Representation: Text to vector. Feature extraction. One hot encoding. Document representation. Word embeddings
- Use case: NLP with Machine learning algorithms (sentiment analysis, text classification, etc.)

Masterclass 2: NLP state of the art: the big revolution

Wednesday, November 8th, 2023, 18:00-20:00h

Contents

- Deep learning algorithms (machine translation, text generation, text summarization, chatbots, QAs)
- Generative Deep learning. Transformers.
- Use cases with machine translation, chatGPT, etc.