

UNIVERSITÀ DEGLI STUDI DI NAPOLI FEDERICO II  
**DOTTORATO DI RICERCA / PhD PROGRAM IN**  
**INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING**

## **Seminar announcement**

**Wednesday 13 April 2022, Time: 11.30-12.30**

**Meeting Room, Floor IV, Building 3, DIETI - Via Claudio, 21 - NAPOLI**

**MsTeams:** <https://teams.microsoft.com/l/team/19%3agCflgCOe7qasFFjRFS2gz0E0bhvFk3cLfBB2N-UG4X41%40thread.tacv2/conversations?groupId=5775ad02-278d-441a-8852-5a560b1edca8&tenantId=2fcfe26a-bb62-46b0-b1e3-28f9da0c45fd>

Teams Code: **jnxqh3b**



### **Dr. Marco Valentino**

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## **An Introduction to Deep Learning for Natural Language Processing**

(with a sketch of some preliminary concepts by Francesco Cutugno)

**Abstract:** Deep Learning has become the dominant paradigm in the field of Natural Language Processing (NLP), constituting, de-facto, the technology underlying many of the state-of-the-art models and architectures. But where does this success come from? This talk aims to investigate this question by tracking the evolution of the main architectural and representational paradigms in Deep Learning. To this

end, we will present and analyze the most successful NLP architectures, ranging from Recurrent Neural Networks (RNNs) to Transformers, highlighting their strengths and limitations. F. Cutugno will present an overview of the main features of these systems when applied to NLP and M. Valentino will show some examples of coding and will describe some of the facilities contained in the Hugging Face Portal.

**Lecturer short bio:** Marco Valentino was a master student at Federico II Computer Sciences degree and now is going to defend his thesis as PhD student in Computer Science at the Reasoning & Explainable AI group at the University of Manchester. He is also presently a Research Intern at the Idiap Research Institute, Martigny, Switzerland. His main research activity focuses on Explainability and Natural Language Inference, investigating the construction and evaluation of models capable of performing complex commonsense and scientific reasoning through the generation of natural language explanations.

For information: Prof. Francesco Cutugno (DIETI, UniNA) – [francesco.cutugno@unina.it](mailto:francesco.cutugno@unina.it) (organizer)