# NAACL-HLT 2021

Deep Learning Inside Out (DeeLIO): The 2nd Workshop on Knowledge Extraction and Integration for Deep Learning Architectures

**Proceedings of the Workshop** 

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## Introduction

Welcome to the Second Workshop on Knowledge Extraction and Integration for Deep Learning Architectures (DeeLIO)! Following the first successful edition of the workshop at EMNLP 2020, DeeLIO 2021 continues to bring together the knowledge interpretation, extraction and integration lines of research in deep learning, and to cover the area in between. Now in its second year, DeeLIO has already been established as a forum for the exchange of ideas on these topics, fostering collaboration within these research fields.

This volume includes the 14 papers presented at the workshop. DeeLIO 2021 was co-located with the Annual Conference of the North American Chapter of the Association for Computational Linguistics (NAACL-HLT 2021) and was held on June 10, 2021 as an online workshop.

We received an exceptional batch of high-quality research papers, and decided to finally accept 14 out of 22 submissions (acceptance rate 63.6%), which were presented at the workshop. It is again great to see that the accepted papers cover both thematic aspects of DeeLIO: the extraction of linguistic knowledge from deep neural models as well as the integration of knowledge from external resources, and all this for different languages and applications. All papers were presented as posters during several online poster sessions with live interactions and Q&A sessions.

We take this opportunity to thank the DeeLIO program committee for their help and thorough reviews. We also thank the authors who presented their work at DeeLIO, and the workshop participants for the valuable feedback and discussions. Encouraged by the great research presented at the workshop and all the positive feedback received, we hope to continue with the DeeLIO organization in the years to come. Finally, we are deeply honored to have three excellent talks from our invited speakers Sebastian Riedel, Vered Shwartz, and Lena Voita.

The DeeLIO workshop organizers, Eneko Agirre, Marianna Apidianaki, and Ivan Vulić

#### **Organizers:**

Eneko Agirre (University of the Basque Country) Marianna Apidianaki (University of Helsinki) Ivan Vulić (University of Cambridge)

### **Invited Speakers:**

Sebastian Riedel (Facebook AI Research and University College London) Vered Shwartz (Allen Institute for AI and University of Washington) Lena Voita (University of Edinburgh and University of Amsterdam)

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