Question 10
Who does research on Natural Language Processing (NLP)?

Answer

Several researchers mentioned in the context conduct research on Natural Language Processing (NLP).

Pierre Nugues (Researcher: Pierre Nugues. Research: In this paper, I describe systems and prototypes we created in the natural language processing group at Lund to extract structured knowledge from text…) and his group at Lund University work on extracting structured knowledge from text using NLP techniques.

Sonja Aits (Researcher: Sonja Aits. Research: Why any scientist can benefit from ChatGPT and other natural language processing tools) discusses the benefits of NLP tools for scientists.

Oscar Kjell and Salvatore Giorgi (Researcher: Oscar Kjell,Salvatore Giorgi. Research: The language that individuals use for expressing themselves contains rich psychological information…) use NLP to analyze human language and extract psychological information.

Salma Kazemi Rashed, Rafsan Ahmed, Johan Frid, and Sonja Aits (Researcher: Salma Kazemi Rashed,Rafsan Ahmed,Johan Frid,Sonja Aits. Research: Here we present a toolbox for natural language processing tasks related to SARS-CoV-2…) develop a toolbox for NLP tasks related to SARS-CoV-2.

Richard Johansson (Researcher: Richard Johansson. Research: Semantic roles, logical relations such as Agent or Instrument that hold between events and their participants and circumstances, need to be determined automatically by several types of applications in natural language processing…) works on semantic role labeling, a key aspect of NLP.

Anders Björkelund, Sameer Pradhan, Alessandro Moschitti, Nianwen Xue, Hwee Tou Ng, Olga Uryupina, Yuchen Zhang, Zhi Zhong (Researcher: Anders Björkelund,Sameer Pradhan,Alessandro Moschitti,Nianwen Xue,Hwee Tou Ng,Olga Uryupina,Yuchen Zhang,Zhi Zhong. Research: Large-scale linguistically annotated corpora have played a crucial role in advancing the state of the art of key natural language technologies such as syntactic, semantic and discourse analyzers…) analyze the performance of state-of-the-art NLP tools on a large-scale, multi-genre corpus.

Johanna Berg, Sonja Aits, Carl Aasa, Björn Appelgren Thorell (Researcher: Johanna Berg,Sonja Aits,Carl Aasa,Björn Appelgren Thorell. Research: Electronic health records (EHRs) are a rich source of information for medical research and public health monitoring…) use NLP to analyze electronic health records.

Per Runeson, Magnus Alexandersson, Oskar Nyholm (Researcher: Per Runeson,Magnus Alexandersson,Oskar Nyholm. Research: Defect reports are generated from various testing and development activities in software engineering…) use NLP to identify duplicate defect reports.

Bengt Sigurd (Researcher: Bengt Sigurd. Research: Computational Linguistics in Sweden) conducts research on computational linguistics in Sweden, which includes NLP.

Pierre M. Nugues (Researcher: Pierre M. Nugues. Research: Since the last edition of this book (2014), progress has been astonishing in all areas of Natural Language Processing…) discusses recent progress in NLP.

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2025-03-14 13:34:43 - Retrieved documents 2025-03-14 13:34:43 - 00 0.5394 Pierre Nugues In this paper, I describe systems and prototypes we created in the natural lan 2025-03-14 13:34:43 - 01 0.5208 Sonja Aits Why any scientist can benefit from ChatGPT and other natural language processi 2025-03-14 13:34:43 - 02 0.4986 Anthony Smoker,Irene Buselli,Luca Oneto,Carlo Dambra,Christian Verdonk Gallego,Miguel Garcia Martinez,Nnenna Ike,Tamara Pejovic,Patricia Ruiz Martino Background: The air traffic management (ATM) system has historicallycoped 2025-03-14 13:34:43 - 03 0.4948 Karin Aijmer Advances in corpus linguistics 2025-03-14 13:34:43 - 04 0.4829 David Johnson Language policy and planning (LPP) is one of the fastest growing sub-disciplin 2025-03-14 13:34:43 - 05 0.4801 Bengt Sigurd The Commentator is a small-scale computer implementation of a model oftext pro 2025-03-14 13:34:43 - 06 0.4730 Pierre M. Nugues Since the last edition of this book (2014), progress has been astonishing i 2025-03-14 13:34:43 - 07 0.4725 Nele Pöldvere,Victoria Johansson,Carita Paradis This talk reports on the compilation of the new London–Lund Corpus (LLC–2) –a 2025-03-14 13:34:43 - 08 0.4711 David Johnson The practice of language policy research 2025-03-14 13:34:43 - 09 0.4650 Oscar Kjell,Salvatore Giorgi The language that individuals use for expressing themselves contains rich p 2025-03-14 13:34:43 - 10 0.4643 Richard Johansson Semantic roles, logical relations such as Agent or Instrument that hold betwee 2025-03-14 13:34:43 - 11 0.4623 Anita Thomas Syntactic priming in second language corpus data—testing an experimental parad 2025-03-14 13:34:43 - 12 0.4608 Anders Björkelund,Sameer Pradhan,Alessandro Moschitti,Nianwen Xue,Hwee Tou Ng,Olga Uryupina,Yuchen Zhang,Zhi Zhong Large-scale linguistically annotated corpora have played a crucial role in adv 2025-03-14 13:34:43 - 13 0.4595 Inger Bierschenk To an ever-increasing extent, in scientific investigations of various kinds ar 2025-03-14 13:34:43 - 14 0.4584 Johanna Berg,Sonja Aits,Carl Aasa,Björn Appelgren Thorell Electronic health records (EHRs) are a rich source of information for medical 2025-03-14 13:34:43 - 15 0.4572 Salma Kazemi Rashed,Rafsan Ahmed,Johan Frid,Sonja Aits Here we present a toolbox for natural language processing tasks related to SAR 2025-03-14 13:34:43 - 16 0.4567 Oscar Kjell,Katarina Kjell,Sverker Sikström,Danilo Garcia Semantic measures: Using natural language processing to measure, differentiate 2025-03-14 13:34:43 - 17 0.4540 Per Runeson,Magnus Alexandersson,Oskar Nyholm Defect reports are generated from various testing and development activities i 2025-03-14 13:34:43 - 18 0.4535 Bengt Sigurd Computational Linguistics in Sweden

Prompt

Given the following context, answer the question at the end. Do not make up facts. Do not use lists. When referring to research mention the researchers names from the context. The name of the researcher will be given first, followed by an abstract of the relevant research. The question will follow the context. Reference the index numbers in the context when replying.

Context:

Researcher: Pierre Nugues. Research: In this paper, I describe systems and prototypes we created in the natural language processing group at Lund to extract structured knowledge from text. Starting from syntactic and semantic parsingcomponents,wedevelopedapplicationsthatcanhandlelargecorpora,typicallycomplete Wikipedia versions consisting of millions of documents and process text to identify entities and the relations between them. I describe the overall goals of our projects, the data structure we designed to handle the documents, as well as three applications to extract knowledge from text.

Researcher: Sonja Aits. Research: Why any scientist can benefit from ChatGPT and other natural language processing tools

Researcher: Anthony Smoker,Irene Buselli,Luca Oneto,Carlo Dambra,Christian Verdonk Gallego,Miguel Garcia Martinez,Nnenna Ike,Tamara Pejovic,Patricia Ruiz Martino. Research: Background: The air traffic management (ATM) system has historicallycoped with a global increase in traffic demand ultimately leading toincreased operational complexity.When dealing with the impact of this increasing complexity on systemsafety it is crucial to automatically analyse the losses of separation(LoSs) using tools able to extract meaningful and actionableinformation from safety reports.Current research in this field mainly exploits natural languageprocessing (NLP) to categorise the reports,with the limitations that theconsidered categories need to be manually annotated by experts andthat general taxonomies are seldom exploited.Methods: To address the current gaps,authors propose to performexploratory data analysis on safety reports combining state-of-the-arttechniques like topic modelling and clustering and then to develop analgorithm able to extract the Toolkit for ATM Occurrence Investigation(TOKAI) taxonomy factors from the free-text safety reports based onsyntactic analysis.TOKAI is a tool for investigation developed by EUROCONTROL and itstaxonomy is intended to become a standard and harmonisedapproach to future investigations.Results: Leveraging on the LoS events reported in the publicdatabases of the Comisi n de Estudio y An lisis de Notificaciones deIncidentes de Tr nsito A reo and the United Kingdom AirproxBoard,authors show how their proposal is able to automaticallyextract meaningful and actionable information from safetyreports,other than to classify their content according to the TOKAItaxonomy.The quality of the approach is also indirectly validated by checking theconnection between the identified factors and the main contributor ofthe incidents.Conclusions: Authors' results are a promising first step toward the fullautomation of a general analysis of LoS reports supported by resultson real-world data coming from two different sources.In the future,authors' proposal could be extended to othertaxonomies or tailored to identify factors to be included in the safetytaxonomies.KeywordsATM, Safety, Resilience, Natural