Proceedings of the 4th Financial Narrative Processing Workshop FNP 2022
Language Resources and Evaluation Conference
24 June 2022, Marseille, France.

Proceedings of the 4th Financial Narrative Processing Workshop
(FNP 2022)

PROCEEDINGS

Editors:
Mahmoud El-Haj
Paul Rayson
Nadhem Zmandar
Welcome to the 4th Financial Narrative Processing Workshop (FNP 2022). This year the workshop is held at the 13th Edition of the Language Resources and Evaluation Conference (LREC 2022) in Marseille, France on 24 June 2022 (a full-day event). This is an international gathering of researchers and speakers working on Financial Narratives from computing, accounting and finance. Following the success of the First FNP 2018 at LREC’18 in Japan, the Second FNP 2019 at NoDaLiDa 2019 in Finland, the Multiling 2019 Financial narrative Summarisation task at RANLP in Bulgaria, the 1st Joint Workshop on Financial Narrative Processing and Multilingual Financial Summarisation (FNP-FNS 2020) at COLING 2020 in Barcelona, Spain and the 3rd Financial Narrative Processing Workshop (FNP 2021) in Lancaster UK, we have received a great deal of positive feedback and interest in continuing the development of the financial narrative processing field, especially from our shared task participants. This has resulted in the organization of the 4th Financial Narrative Processing Workshop (FNP 2022). The FNP 2022 workshop achieved our aim of supporting the rapidly growing area of financial text mining. We ran three different shared tasks focusing on text summarization, structure detection and causal sentence detection, namely FNS, FinToc and FinCausal shared tasks respectively. The shared tasks attracted several teams from different universities and organisations from around the globe. The shared tasks resulted in the large scale experimental results and state of the art methods applied mainly to financial data. This shows the importance and growth of this field and we want to continue to be associated with top NLP venues. The workshop focused mainly on the use of Natural Language Processing (NLP), Machine Learning (ML), and Corpus Linguistics (CL) methods related to all aspects of financial text summarisation, text mining and financial narrative processing (FNP). There is a growing interest in the application of automatic and computer-aided approaches for extracting, summarising, and analysing both qualitative and quantitative financial data. In recent years, previous manual small-scale research in the Accounting and Finance literature has been scaled up with the aid of NLP and ML methods, for example, examining approaches to retrieving structured content from financial reports and studying the causes and consequences of corporate disclosure and financial reporting outcomes. We accepted 25 submissions. Each paper was reviewed by up to three reviewers. The submissions distribution is as follows: 6 main workshop papers and 19 shared task papers. The papers covered a diverse set of topics in financial narratives processing reporting work on financial reports from different stock markets around the globe presenting analysis of financial reports and using state of the art NLP methods such as the use of latest word embeddings. The quantity and quality of the contributions to the workshop are strong indicators that there is a continued need for this kind of dedicated Financial Narrative Processing workshop. We would like to acknowledge all the hard work of the submitting authors and thank the reviewers for the valuable feedback they provided. We hope these proceedings will serve as a valuable reference for researchers and practitioners in the field of financial narrative processing and NLP in general.
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Dr Mahmoud El-Haj, Lancaster University (General Chair)
Dr Paul Rayson, Lancaster University (FNP Program Chair)
Nadhem Zmandar, Lancaster University (Publication Chair and FNS Organiser)

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FNS Organiser: Paul Rayson (Lancaster University)
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FinToc Organiser: Abderrahim Aitazzi, Fortia
FinToc Organiser: Dr Juyeon Kang, Fortia Financial Solution
FinToc Organiser: Blanca Carbajo Coronado, Universidad Autónoma de Madrid
FinToc Organiser: Dr Ismail El Maarouf, Fortia Financial Solutions
FinToc Organiser: Dr Juyeon Kang, Fortia Financial Solutions
FinToc Organiser: Prof. Ana Gisbert, Universidad Autónoma de Madrid
FinToc Organiser: Prof. Antonio Moreno Sandoval, Universidad Autónoma de Madrid
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FinCausal Organiser: Hanna Abi-Akl, Yseop Lab
FinCausal Organiser: Hugues de Mazancourt, Yseop Lab
FinCausal Organiser: Estelle Labidurie, Yseop Lab

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Paul Rayson (SCC, Lancaster University, UK)
Dominique Mariko (Yseop, France)
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9:00–9:15 Opening and Welcome  
Chair: Mahmoud El-Haj

9:15–10:00 Keynote Speaker  
Dr Bayan Abu Shawar

10:00–13:30 Session 1: Main Workshop Papers  
Chairs: Houda Bouamor, Paul Rayson

*FinRAD: Financial Readability Assessment Dataset - 13,000+ Definitions of Financial Terms for Measuring Readability*  
Sohom Ghosh, Shovon Sengupta, Sudip Naskar and Sunny Kumar Singh

11:00–11:30 Coffee Break

*Discovering Financial Hypernyms by Prompting Masked Language Models*  
Bo Peng, Emmanuele Chersoni, Yu-Yin Hsu and Chu-Ren Huang

*Sentiment Classification by Incorporating Background Knowledge from Financial Ontologies*  
Timen Stepišnik-Perdih, Andraž Pelicon, Blaž Škrlj, Martin Žnidaršič, Igor Lončarski and Senja Pollak

*Detecting Causes of Stock Price Rise and Decline by Machine Reading Comprehension with BERT*  
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*XLNET-GRU Sentiment Regression Model for Cryptocurrency News in English and Malay*  
Nur Azmina Mohamad Zamani, Jasy Suet Yan Liew and Ahmad Muhyiddin Yusof
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14:30–15:30 Session 2: FNS Shared Task
Chair: Nadhem Zmandar

*The Financial Narrative Summarisation Shared Task (FNS 2022)*
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Chair: Juyeon Kang

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Bundle of Documents
Emmanuel Giguet and Nadine Lucas

16:45–17:55  Session 4: FinCausal Shared Task
Chair: Dominique Mariko

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