WANLP 2021

The Sixth Arabic Natural Language Processing Workshop

Proceedings of the Workshop

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Message from the General Chair

Welcome to The Sixth Arabic Natural Language Processing Workshop (WANLP 2021) held with EACL 2021 online. Over the years, WANLP has developed a growing reputation as a high quality venue for researchers and engineers working on Arabic NLP, where they share and discuss their ongoing work. The first in the WANLP series was held in Doha, Qatar (EMNLP 2014), followed by Beijing, China (ACL 2015), Valencia, Spain (EACL 2017), Florence, Italy (ACL 2019), and last year, online, with COLING 2020.

In this iteration of WANLP, we received 40 main workshop submissions (28 long and 12 short). While the total number of submissions is lower than WANLP 2020, it surpassed our expectations since we were concerned about a big drop due to the continuing COVID-19 pandemic and the temporal closeness to WANLP 2020 (less than six months earlier in December 2020). All papers submitted to the main workshop were reviewed by at least three reviewers each. Out of the 40 submissions, 27 were accepted: 18 long papers, and nine short papers (one as a demo paper). We selected 16 papers for oral presentation, and the rest as posters. We did not distinguish between long and short papers, or between oral and poster presentations in terms of quality.

WANLP 2021 included, for the first time, two shared tasks: The Nuanced Arabic Dialect Identification (NADI) shared task and the Sarcasm and Sentiment Detection in Arabic shared task (ArSarcasm). NADI received submissions from eight teams, seven of which have system descriptions in the proceedings; and ArSarcasm received submissions from 30 unique teams, 17 of which have system descriptions in the proceedings. The shared task system descriptions papers were reviewed by two reviewers each. Two additional shared task overview papers are included in the proceedings. The overview papers and the papers of the shared task winning systems were presented as talks in the workshop.

In addition to the first double shared tasks, WANLP 2021 was the first time our workshop was able to secure sponsorship funding (Thanks Google!) which we used to support student registrations. Also in another first for WANLP, we held parallel sessions for part of the workshop. This was a bittersweet decision: on one hand, we were sad to sacrifice the shared experience of the workshop, but on the other, we were happy to see WANLP growing... one step closer to becoming a small conference!

Finally, we would like to thank everyone who submitted a paper to the workshop, as well as all the members of the Program Committee, who worked hard to provide reviews on a very tight schedule.

Nizar Habash, General Chair, on behalf of the workshop organizers.

Website of the workshop: http://wanlp2021.arabic-nlp.net/

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Workshop Program

Monday April 19, 2021 - Time zone · Central European Time (CET)

- 09:00–09:10 *Opening Remarks* Nizar Habash
- 09:10–10:00 Keynote Speaker Hend Al Khalifa

+ Main Workshop

10:00–11:00 Session 1-a: Social Analytics

Arabic Offensive Language on Twitter: Analysis and Experiments Hamdy Mubarak, Ammar Rashed, Kareem Darwish, Younes Samih and Ahmed Abdelali

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Fatima Haouari, Maram Hasanain, Reem Suwaileh and Tamer Elsayed

10:00-11:00 Session 1-b: NLU/NLG

What does BERT learn from Arabic machine reading comprehension datasets? Eman Albilali, Nora Altwairesh and Manar Hosny

Automatic Difficulty Classification of Arabic Sentences Nouran Khallaf and Serge Sharoff

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Empathetic BERT2BERT Conversational Model: Learning Arabic Language Generation with Little Data Tarek Naous, Wissam Antoun, Reem Mahmoud and Hazem Hajj

11:00–11:30 Coffee Break

11:30–12:30 Session 2-a: Information Extraction

Dynamic Ensembles in Named Entity Recognition for Historical Arabic Texts Muhammad Majadly and Tomer Sagi

Improving Cross-Lingual Transfer for Event Argument Extraction with Language-Universal Sentence Structures Minh Van Nguyen and Thien Huu Nguyen

SERAG: Semantic Entity Retrieval from Arabic knowledge Graphs Saher Esmeir

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12:30–13:30 Session 3: Panel: Arabic NLP and Industry

13:30–15:00 Lunch Break

15:00–16:00 Session 4: Shared Tasks

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16:00–17:30 Session 5: Poster

16:00–16:30 *Poster Boaster* Nadi Tomeh and Fethi Bougares

> *QuranTree.jl: A Julia package for Quranic Arabic Corpus* Al-Ahmadgaid Asaad

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17:30–18:00 *Closing Ceremony* Nizar Habash