

Selected Papers from EKAW 2018

Catherine Faron^a, Chiara Ghidini^b

^a *Université Côte d'Azur, France*

^b *Fondazione Bruno Kessler, Italy*

Editors: Pascal Hitzler, Kansas State University, USA; Krzysztof Janowicz, University of California, Santa Barbara, USA

This special issue gathers the extended version of three of the four best papers accepted at EKAW 2018, the 21st International Conference on Knowledge Engineering and Knowledge Management, held in Nancy, France, in November 2018. The special theme of EKAW 2018 was *Knowledge and AI*. We were indeed calling for papers describing algorithms, tools, methodologies, and applications that exploit the interplay between knowledge and Artificial Intelligence techniques, with a special emphasis on knowledge discovery. Accordingly, EKAW 2018 put a special emphasis on the importance of Knowledge Engineering and Knowledge Management with the help of AI as well as for AI. In this way, EKAW 2018 welcomed papers dealing with theoretical, methodological, experimental, and application-oriented aspects of knowledge engineering and knowledge management. In particular, we were expecting papers about methods, tools and methodologies relevant to the following topics: knowledge and AI, knowledge discovery, knowledge management, knowledge engineering and acquisition, social and cognitive aspects of knowledge representation, and applications in specific domains. In addition to this specific focus, EKAW as usual covered all aspects of eliciting, acquiring, modeling, and managing knowledge, the construction of knowledge-intensive systems and services for the Semantic Web, knowledge management, e-business, natural language processing, intelligent information integration, personal digital assistance systems, and a variety of other related topics.

The EKAW 2018 Program Committee, chaired by Catherine Faron from Université Côte d'Azur, France, and Chiara Ghidini from Fondazione Bruno Kessler, Italy, received 104 submissions, out of which 36 were accepted for publication in the conference proceedings (34 % overall acceptance rate). Four papers were invited to extend their conference paper to a full jour-

nal paper. These selected papers had then to undergo at least one more round of reviews. As a result this EKAW 2018 special issue of the Semantic Web Journal gathers the three following papers.

The paper entitled *Typology-based Semantic Labeling of Numeric Tabular Data* and written by Ahmad Alobaid, Emilia Kacprzak, and Oscar Corcho tackles the problem of understanding and exploiting the mass of tabular data published on the Web. It presents a typology of numerical values and an approach to detect the type of a list of numerical values that enables to improve the assignment of semantic labels to numerical columns in a dataset.

The paper entitled *Network Metrics for Assessing the Quality of Entity Resolution between Multiple Datasets* and written by Al Idrissou, Frank van Harmelen, and Peter van den Besselaar tackles the problem of data integration on the Semantic Web and focuses and contributes to answering the problem of entity linking by proposing a method to estimate the quality of entity links between multiple datasets, that exploits the network of links between entities from multiple datasets with simple metrics.

The paper entitled *Deploying Spatial-Stream Query Answering in C-ITS Scenarios* and written by Patrik Schneider, Thomas Eiter, Josiane Xavier Parreira, and Ryutaro Ichise addresses various use cases in Cooperative Intelligent Transport Systems (C-ITS) scenarios and proposes an implementation of the associated requirements based on a mobility ontology and an ontology-mediated query answering approach enabling to express spatial and temporal relationships, delaying, numeric predictions and trajectory predictions.

In our views, these papers are representative of the current strength of the Knowledge Engineering community and the current trends in combining Knowl-

edge Engineering and Artificial Intelligence techniques to achieve Intelligent Systems.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51