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ISSN 0302-9743

ISSN 1611-3349 (electronic)

Lecture Notes in Computer Science

ISBN 978-3-030-80417-6

ISBN 978-3-030-80418-3 (eBook)

<https://doi.org/10.1007/978-3-030-80418-3>

LNCS Sublibrary: SL3 – Information Systems and Applications, incl. Internet/Web, and HCI

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The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

Preface

This book bundles together the contributions to the Posters and Demos, Industry, PhD, and Workshops and Tutorials tracks of ESWC 2021. Below, the chairs will bring the highlights of their tracks.

This year the Posters and Demos Track attracted 45 submissions, of which 27 (60%) were accepted. Each submission received 3–4 detailed reviews, which were provided by a Program Committee of 55 international experts. This year saw some changes with respect to previous editions. Submissions and reviews were handled for the first time through the OpenReview system, following the precedent set by the Research, In-Use, and Resources Tracks. Due to the COVID-19 pandemic, and the move towards an online ESWC (for the second year running), the Posters and Demos track was held virtually, on gather.town, where webpages replaced traditional posters and one-minute videos provided authors an opportunity to attract interested attendees to their virtual stand.

The PhD symposium received 10 submissions, out of which 6 were accepted, 2 rejected, and 2 conditionally accepted and, after a shepherding process, finally accepted. Each submission received 3 reviews from a Program Committee of 30 international experts. Each PhD student was assigned a mentor to interact with for preparing the final camera-ready version and the paper presentation. Furthermore, all students that submitted a paper to the PhD symposium had the chance to participate, on a voluntary basis, in a review process exercise consisting of reviewing one of the submitted papers and comparing their reviews to those provided by the experts for the same paper. The goal was to understand the review process following the learning by doing approach. All students but one decided to join this activity. Being an exercise, the reviews provided by students were not considered for the paper evaluations. In addition, authors of accepted papers had the chance to join, on a voluntary basis, the posters and demos session to present their work to a (possibly) broader audience than the one of the PhD symposium itself. The accepted papers covered a broad range of topics such as visual intelligent agents and multi-agent systems, improvement of decision making, exploitation of Knowledge Graphs and ontologies in different domains, and event identifications.

The Industry Track of ESWC 2021 solicited success stories as well as reports on failure analysis and the adoption of semantic technologies in real-world industrial environments, along with contributions on current challenges in the industry that might be tackled with semantic technologies. We received a total of 7 submissions, out of which 3 (~40%) were accepted for extension and presentation as part of this track after reviews were provided by 11 experts from across industry and academia. The accepted articles focused on the automatic construction of knowledge graphs (KGs) from technical support pages and the usage of these KGs to drive applications, the implementation of a semantic information model for supporting the integration of heterogeneous data sources in an industrial production line, and the conceptualization of a

taxonomy management software platform for managing enterprise content in a video games company.

During ESWC 2021, the following six workshops took place: i) the Second International Workshop on Deep Learning meets Ontologies and Natural Language Processing (DeepOntoNLP 2021), ii) the Second International Workshop on Semantic Digital Twins (SeDiT 2021), iii) the Second International Workshop on Knowledge Graph Construction (KGC 2021), iv) the 6th International Workshop on eXplainable SENTiment Mining and Emotion deTecton (X-SENTIMENT 2021), v) the 4th International Workshop on Geospatial Linked Data (GeoLD 2021), and vi) the Domain Ontologies for Research Data Management in Industry Commons of Materials and Manufacturing Workshop (DORIC-MM 2021). Additionally, we also had three tutorials that covered the following topics: i) “Modular Ontology Engineering with CoModIDE”, ii) “Constructing Question Answering Systems over Knowledge Graphs”, and iii) “SPARQL Endpoints and Web API”. We thank all the workshop chairs and the tutorial presenters for their efforts to organize and run their respective events.

May 2021

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