LDAC2019
7th Linked Data in Architecture and Construction Workshop

Proceedings of the 7th Linked Data in
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(eds)

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The LDAC workshop series provides a focused overview on technical and applied research regarding the usage of semantic web, linked data and web of data technologies for architecture and construction (design, engineering, construction, operation, etc.). The workshop aims at gathering researchers, industry stakeholders, and standardization bodies of the broader Linked Building Data (LBD) community. This includes mainly the participants of the W3C Linked Building Data (LBD) Community Group. The aim of the workshop is to present current developments, coordinate efforts, gather stakeholders, and elaborate use cases.

We are delighted to collect in this volume the papers that were submitted and presented during the 7th Linked Data in Architecture and Construction Workshop. The workshop took place in Lisbon, from the 19th until the 21st of June 2019. The workshop was preceded by a summer school (17-18 June). During these days, the workshop attendees attended the presentations of the eight peer reviewed paper submissions in the proceedings. Furthermore, the workshop included a fruitful technical session and two inspiring invited keynotes:

- *"Building a decentralized Semantic Web"* by **Ruben Verborgh** (Ghent University – imec): Semantic Web technologies tackle many challenges, not in the least those arising from the decentralized nature of the Web. Things could be so much easier if knowledge were in once place, but it isn't—or is it? The Semantic Web research community has spent quite some time looking at centralized problems, but we might still be ill-prepared for the challenges ahead. In this talk, I will sketch current efforts for re-decentralizing the Web and the role that Linked Data will play when the story unfolds.
- *"History of the Semantic Web, and some words about the future of AI?"* by **Ora Lassila** (State Street): The Semantic Web has been around for some 20 years, introducing many people to the idea of ontologies and knowledge representation. In this talk I shed some light to the genesis of the Semantic Web and to what motivated the early research and standardization. Of particular interest, I hope, is the somewhat contentious relationship between the Semantic Web (and particularly Linked Open Data) and the broader field of Artificial Intelligence. Much of what should be regarded as a successful adoption and deployment of the technologies that the Semantic Web represents is

overshadowed by the "miraculous success" of Machine Learning that has also taken place during the last two decades, rendering the terms ML and AI almost synonyms. Recently, however, many people have discovered the lack of transparency of ML applications, something ontology-based, symbolic AI techniques can offer. At the same time, the "precise" nature of symbolic reasoning is seen as a hindrance to the adoption of the Semantic Web. How can these two fields of AI complement one another?

Acknowledgments

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