Preface: DISCO2021 - Digital Infrastructures for Scholarly Content Objects at JCDL2021

As digital libraries make the dissemination of research publications easier, they also enable the propagation of invalid or unreliable knowledge. Examples of relevant problems include: retraction and unknowing/unintentional citation and reuse of retracted papers; propagation of errors in literature and scientific databases; non-reproducible papers; known domain-specific issues such as cell line contamination; bias in research datasets and publications; systematic reviews that come up with different conclusions for the same problem at the same time. In the digital environment, which facilitates broad interdisciplinary reuse beyond the originating scientific community, marking known problems and tracing the impact on dependent and follow-on works is an important, but under-addressed problem. Further, context-specific information inside a paper may not be immediately reusable when extracted by automated processes, leading to apparent contradictions. Current mitigating approaches use the underlying reasoning for information retrieval, develop new infrastructures analyzing the reasoning or certainty of statements, or use visualization to highlight possible discrepancies.

The goal of the Digital Infrastructures for Scholarly Content Objects (DISCO2021) workshop at JCDL 2021 is to raise awareness of quality issues and re-use challenges in digital infrastructures for scholarly content, and collect potential solutions among an audience of diverse expertise. DISCO’s expected audience includes digital publishing and digital library practitioners and researchers. The workshop may be of particular interest to researchers in semantic publishing, information quality, provenance, trust, workflows, text mining, database curation, and knowledge graphs. Users of digital infrastructures may also contribute, particularly domain researchers in evidence synthesis communities, innovators in open science, robustness and reproducibility, and those helping researchers organize, find, and use scholarly literature.

There were 9 papers submitted for peer-review to this workshop. Out of these, 6 papers were accepted for this volume, 3 as regular papers and 3 as short papers.

Workshop Chairs:

- Wolf-Tilo Balke, TU Braunschweig, Braunschweig, Germany
- Anita de Waard, Elsevier, New York, NY, USA
- Yuanxi Fu, University of Illinois Urbana-Champaign, Urbana-Champaign, IL, USA
- Bolin Hua, Peking University, Beijing, China
- Jodi Schneider, University of Illinois Urbana-Champaign, Urbana-Champaign, IL, USA
- Ningyuan Song, Nanjing University, Nanjing, China
- Xiaoguang Wang, Wuhan University, Wuhan, China

Program Committee:

- Akiko Aizawa, National Institute of Informatics, Japan
- Bob Allen, New York, NY, USA
- Sören Auer, Leibniz Information Centre for Science and Technology University Library (TIB), Germany
- Christian Bölling, Natural History Museum, Berlin, Leibniz Institute for Evolution and Biodiversity Science, Germany
• Florian Boudin, University of Nantes, France
• Gully Burns, Chan Zuckerberg Initiative, USA
• Joel Chan, University of Maryland, USA
• Tim Clark, University of Virginia, USA
• Jennifer D’Souza, Leibniz Information Centre for Science and Technology University Library (TIB), Germany
• Edward Fox, Virginia Tech, USA
• Nancy Green, University of North Carolina Greensboro, USA
• Hermann Kroll, Technical University of Braunschweig, Germany
• Allard Oelen, L3S Research Center, Germany
• Halie Rando, University of Colorado Anschutz Medical Campus, USA
• Thomas Stoeger, Northwestern University, USA
• Markus Stocker, Leibniz Information Centre for Science and Technology, Germany

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