Aims of the Workshop

The workshop on Web Data Processing and Reasoning (WDPAR) aims to provide a forum for scientists, researchers and practitioners to discuss and exchange ideas, new techniques, approaches and applications related to the web, e.g. approaches for and applications utilizing web data (i.e., data collected from the web, available in the web or being about the web), execution environments in the web and advanced web applications. A special focus of the workshop is on intelligent web data processing via reasoning for data exchange, data integration and advanced applications.

Types of Papers

The workshop solicits high-quality papers of different categories:

- **Research Papers** propose new approaches, theories or techniques related to Web Data Processing and Reasoning including new data structures, algorithms and whole systems. They should make substantial theoretical and empirical contributions to the research field.

- **Experiments and Analysis Papers** focus on the experimental evaluation of existing approaches including data structures and algorithms and bring new insights through the analysis of these experiments. Results of Experiments and Analysis Papers can be, for example, showing benefits of well-known approaches in new settings and environments, opening new research problems by demonstrating unexpected behavior or phenomena, or comparing a set of traditional approaches in an experimental survey.

- **Application Papers** report new applications and practical experiences on applications related to the web. Application Papers might describe how to apply Web technologies to specific application domains with web-scale data demands like social networks, web search, e-business, collaborative environments, e-learning, medical informatics, bioinformatics and geographic information system. We especially welcome Application Papers describing applications utilizing reasoning about web data in a new way.

- **Vision Papers** identify emerging or future research issues and directions, and describe new research visions for web data processing and reasoning. The new visions will potentially have great impacts on society.

Topics of Interest

Topics relevant to this workshop include, but are NOT limited to:

- Optimization of Web Data Processing
- Applications of Web Data
- Reasoning on Web Data
- Advanced and New Forms of Web Applications
- Web Streams
  - Continuous Queries and Reasoning
  - Stream Pipelines
  - Fault-Tolerant Stream Processing
  - Optimized Processing of a web-scale number of queries
- Semantic Web
  - Applications
  - Semantic Big Data
  - Reasoning
  - Semantic Data and Query Processing
- Linked Data
  - Integration of Heterogeneous Linked Data
  - Real-World Applications
  - Statistics and Visualizations
  - Quality
  - Ranking Techniques
  - Provenance
  - Mining and Consuming Linked Data
- Distributed Processing of Data in the Web
  - Distributed Reasoning
  - Distributed Rule Processing
  - Distributed Query Processing
  - Fault-Tolerant Processing
- Processing of and Reasoning about Web Services
  - Orchestration
  - New protocols for web services
- Rule Processing of Web Data
- Evaluation of different Learning Approaches in the context of Web Data and Web Applications: unsupervised learning, supervised or reinforced learning, transfer learning, zero-shot learning, adversarial networks, and deep probabilistic models
- Knowledge Representation and Retrieval of Web Data
- Web Data exploration and visualization
- Web Data Mining
- Learning for Web Database Tuning and Web Query Optimization
- Case studies of AI-Accelerated Web Workloads
- Web Protocols and Standards
- AI-Enabled Web Data Integration Strategies
- Web Security and Privacy
- Web Trust
- Natural Language Processing for Web Applications
  - Queries and Chatbot Interfaces
  - Result Summarization
Evaluating Quality of Approximate Results from AI-Enabled Web Queries

WORKSHOP CHAIRS

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IMPORTANT DATES

Submission (extended): June 25, 2018
Notification: July 9, 2018
Workshop: September 25, 2018

SUBMISSION

Authors are invited to submit original, unpublished research papers that are not being considered for publication in any other forum.

Accepted papers will be published online in the Open Journal of Web Technologies. OJWT is an open access journal, and the proceedings will hence be highly visible to all interested readers.

Manuscripts should be formatted using the templates of the Open Journal of Web Technologies. Research papers as well as experiments and analysis papers should have between 6 and 15 pages, application papers between 6 and 12 pages and vision papers between 4 and 12 pages.

We describe manuscript preparation and submission procedure at http://www.ifis.uni-luebeck.de/~groppe/wdpar/submit