

# Web2Touch 2021: Deep Knowledge Methods for Information Sharing and Web Collaboration

Conference Track @ 30<sup>th</sup> IEEE WETICE 2020-2021

Biarritz, France, June 09-11, 2021

<http://web2touch2021.gear.host/index.html>

## Objectives

Web2Touch (W2T), since its early days, is committed to bringing solutions for collaborative work using the Web. New advances in Web-based systems are the driver for changes in cooperative activities occurring in smart environments, cities, communities, or urban and rural areas, where human tasks are more and more performed via the Internet and the Web. Both Web practitioners and ordinary users are exploiting in rapidly-varying ways the richness of Web platforms to support a multitude of activities, from daily operations to strategic decision making. Based on these considerations, the W2T track considers knowledge sharing based on software engineering, on artificial intelligence, and on knowledge engineering (e.g. ontologies, taxonomies, etc.). The focus of the track is on information creation, maintenance, disambiguation, interlinking, veracity and security. Reasoning and deep learning techniques are considered, since these lead to better decisions or awareness of reality and its events. W2T deepens the concept of working together by exploring decision assistance, collective intelligence, smart environments, intentions-based analysis, and other collaborative web-based ways of problem solving. In the urban scenario, for example, Internet of Things (IoT) systems capture massive data collections describing the overall urban environment as well citizen exploitation and perception of available services. In health care systems, electronic health records allow storing a variety of information about patients as adopted treatments and monitored physiological conditions, while the Internet of Medical Things (IoMT) ensures the availability and processing of healthcare data through smart medical devices and the web. Moreover, in most domains, cooperation plays a crucial role in generating data, specifying knowledge, driving a user and context aware analysis process, and finally demanding an easily accessible and understandable knowledge at the end of the process.

W2T aims at exploring the state-of-the-art on these topics and users' practical experiences, as well as trends and research, paving the way for cutting-edge collaborative approaches to knowledge engineering and sharing.

*In the previous editions of W2T, which started in 2007, best papers were published in International Journals, such as Journal of Web Portals (2011 and 2013), Concurrency and Computation and Collaborative Enterprise (2013), Future Generation Computer Systems (2015 and 2016), and Springer Nature Computer Science (2019).*

## Topics Covered

W2T concerns improvements to cooperative work obtained through enhanced organization and management of knowledge. Examples are models and tools to represent dynamic changes in shared information, context-aware Web applications, new domains of application of semantic techniques, such as Industry 4.0, Big Data, social networks, Internet of Things, enhanced connectivity, and mobile technologies. W2T is also about practical experiences in both well established and emerging interdisciplinary applications, including eHealth, smart cities and companies, eLearning, and digital cultural heritage. Contributions addressing one or more of the following topics are expected:

- Ontologies, Knowledge Graphs and Reasoning
  - Ontology tools, ontology engineering, reuse and integration
  - Knowledge quality assessment
  - Knowledge discovery in knowledge graphs
  - Knowledge and data provenance
  - Automatic reasoning on complex data and knowledge
  - Deep learning and machine learning approaches for knowledge graphs
- Shared and collaborative knowledge management
  - Data integration and interlinking from and across different sources and formats/semantics including Big Data, linked open data, crowdsourced data, social data, knowledge networks data
  - Crowdsourcing techniques for semantic collaboration and platform self-maintenance
- Semantics in mobile Web, wearable devices, edge computing, cross-device content management and delivery
- Semantic annotations, 'semantifying' collaborative Web sources and semantic technologies for information Extraction Transformation and Loading (ETL)
- Collaborative Web engineering and applications
  - Experiences and best practices in deep Web for collaborative work and business
  - Collaborative Web in interdisciplinary applications, such as Web science, eHealth, smart environments, smart factories in Industry 4.0, and cultural heritage
  - Data quality and fairness in cooperative Web-based predictions and decision making
  - Experiences derived from the analysis of publicly available datasets, such as: Computer Science Education (e.g., Blackbox, Engage-csedu), MOOC (e.g., Coursera, EdX), Computer Virology (e.g., Genoma, Drebin), Healthcare, Bioinformatics (e.g., Dream Challenges).

## Important Dates

- ◊ Deadline submission: **April 15, 2021 (extended deadline)**
- ◊ Notification to authors: April 30, 2021
- ◊ Camera ready submission: May 7, 2021
- ◊ Conference: June 23-25, 2021

## Chairs

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## Paper Submission

Papers submitted to W2T 2021 must be written in English, formatted according to IEEE WETICE 2021 instructions, and submitted in PDF format. Papers should be up to six (6) pages (including figures, tables and references) for *full papers*, four (4) pages for *short papers*. Papers should contain original contributions *not published or submitted elsewhere*. Papers have to be submitted through EasyChair (link on website). Consider [rodrigo.bonacin@gmail.com](mailto:rodrigo.bonacin@gmail.com), [olgafernanda@gmail.com](mailto:olgafernanda@gmail.com) and [mariagrazia.fugini@polimi.it](mailto:mariagrazia.fugini@polimi.it) for your questions.