Call for Contributions for Submission: 1. Inform the Chair: with the Title of your Contribution 2. Submission URL: https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=SEMAPRO+2017+Special Please select Track Preference as SeRIAH

Special track

SeRIAH: Semantic Resources, Interoperability and Applications in Healthcare

Chair and Organizer

Dr. Elena Cardillo, PhD, Institute of Informatics and Telematics – National Research Council, Italy <u>elena.cardillo@iit.cnr.it</u>

along with

SEMAPRO 2017, The Eleventh International Conference on Advances in Semantic Processing <u>http://www.iaria.org/conferences2017/SEMAPRO17.html</u> November 12 - 16, 2017 - Barcelona, Spain

Healthcare information is composed of many types of varying and heterogeneous data. Semantic interoperability in healthcare is especially important when all these different types of data need to be exchanged. The use of semantic resources (e.g. clinical terminologies, biomedical ontologies, linguistic resources, clinical data models, etc.) is essential for achieving semantic interoperability and thus improving communication in healthcare, and ultimately benefiting patients care. Those systems, generally, allow to structure and represent complex information fostering their correct interpretation and sharing. More specifically, coding and classification systems are essential instrument for the unambiguous coding of clinical concepts during the process of care and during the delivery of health services and for improving access to and elaboration of data in healthcare information systems. Furthermore, the rapid evolution of health informatics and of e-Health platforms in the world, and in Europe in particular, as well as patient empowerment and the increasing demand for continuity of care, required the publication of numerous standards to govern and guide electronic exchange and storage of medical information. The application of semantic resources and technologies together with the implementation of standards are challenges for improving the semantic interoperability of clinical information and can be useful at different levels (e.g. for clinical purposes; exploitation of the data for decision support, communication with the patient, information retrieval, for research purposes and for public health policy).

The aim of this track is to raise awareness for the need to guarantee semantic interoperability in healthcare and thus to integrate structured and unstructured data, and encourage the research community to develop approaches and tools based on standards to improve semantic interoperability in the field of healthcare.

The topic suggested by the special track can be discussed in term of concepts, state of the art, research, standards, implementations, running experiments, applications, and industrial case studies. Authors are invited to submit complete unpublished papers, which are not under review in any other conference or journals.

Topics include, but not limited to:

- Harmonization of interoperability standards and specifications among different SDOs
- Terminology and ontology in Semantic Interoperability of Electronic Health Records (EHRs)
- Biomedical Knowledge Representation and Reasoning
- Ontology Matching

- Semantic annotation of biomedical text and data
- Semantic Data Modeling, Mining and Integration in Healthcare
- Semantic and rule-based systems for healthcare data interpretation, coding and presentation
- Creation and implementation of domain-specific semantic interoperability resources
- Implementation of standards and services for Semantic Interoperability
- Novel tools for improving mapping between local, national and international terminology standards

Important Datelines

- Inform the Chair: As soon as you decided to contribute
- Submission: October 4
- Notification: October 11
- Registration: October 18
- Camera ready: October 18

Note: These deadlines are somewhat flexible, providing arrangements are made ahead of time with the chair.

Contribution Types

- Regular papers [in the proceedings, digital library]
- Short papers (work in progress) [in the proceedings, digital library]
- Posters: two pages [in the proceedings, digital library]
- Posters: slide only [slide-deck posted on www.iaria.org]
- Presentations: slide only [slide-deck posted on www.iaria.org]
- Demos: two pages [posted on www.iaria.org]

Paper Format

- See: http://www.iaria.org/format.html
- Before submission, please check and comply with the editorial rules: http://www.iaria.org/editorialrules.html

Publications

- Extended versions of selected papers will be published in IARIA Journals: http://www.iariajournals.org
- Print proceedings will be available via Curran Associates, Inc.: http://www.proceedings.com/9769.html
- Articles will be archived in the free access ThinkMind Digital Library: <u>http://www.thinkmind.org</u>

Paper Submission

https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=SEMAPRO+2017+Special Please select Track Preference as **SeRIAH**

Registration

- Each accepted paper needs at least one full registration, before the camera-ready manuscript can be included in the proceedings.

- Registration fees are available at http://www.iaria.org/registration.html

Contacts

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