Call for Contributions for Submission: 1. Inform the Chair: with the Title of your Contribution 2. Submission URL: <u>https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=SEMAPRO+2019+Special</u> Please select Track Preference as SKOSCyb

Special track

#### SKOSCyb: Semantics and Knowledge Organization Systems for Cybersecurity

Chair

PhD Candidate, Claudia Lanza, University of Calabria (UNICAL), Italy <u>c.lanza@dimes.unical.it</u>

#### Coordinator

PhD, Maria Taverniti, National Research Council - Institute of Informatics and Telematics of Cosenza, University of Calabria, Italy maria.taverniti@cnr.it

along with

SEMAPRO 2019, The Thirteenth International Conference on Advances in Semantic Processing <u>http://www.iaria.org/conferences2019/SEMAPRO19.html</u> September 22, 2019 to September 26, 2019 - Porto, Portugal

Cybersecurity is turning into a prevailing topic not only within the community of experts in ICT domain, but also for a wide-ranging spectrum of target public. Managing the information dealing with this topic allows bringing out explicit and tacit knowledge and realizing a representation of the information in an inter-related system of concepts connected to each other.

Cybersecurity owns a particular lexicon that usually can be difficult to broadly understand. Such specific lexicon can be managed by organizing it and representing it with the realization of semantic resources, such as ontologies and thesauri. Indeed, developing semantic tools to manage a specific type of knowledge, i.e., that of Cybersecurity, can grant a better form of comprehension on the way concepts that represent the domain of interest are related to each other. The advantage is twofold: on the one hand, research on SKOS (Semantics and Knowledge Organization Systems) can enhance its perimeter in building more sophisticated systems to organize specialized areas of study; on the another hand, enterprises, experts, can have a clearer overview from a semantic point of view on the field within which they work.

The usage of NLP (Natural Language Processing) techniques to process the information, the realization of thesauri with the implementation of semantic relations referred to the ISO standards, and the application of RDF (Resource Description Framework) and OWL (Web Ontology Language) languages to represent the conceptual interrelation for structuring a particular field of knowledge, are just some examples of the experimental paths papers can present for this track.

This track is intended to present papers dealing with these issues. In particular, papers which can combine the development of semantic resources towards the enhancement of the knowledge representation and organization of the cybersecurity domain, as well as of others specific fields that are characterized by a sectororiented terminology. Papers should provide examples of projects already completed or undergoing using SKOS and or ad hoc KOS software. Particular attention will be given to papers which present a focus on the treatment of specialized terminologies, such as the one proper to Cybersecurity area or others that can be compared to its linguistics scope.

#### Topics include, but not limited to:

- Semantics;
- Terminology;
- NLP;
- Knowledge organization;
- Thesauri;
- Ontologies;
- Information retrieval;
- Terminology extraction;
- Cybersecurity.

#### **Important Datelines**

Inform the Chair: As soon as you decide to contribute Submission: July 26, 2019 Notification: August 16, 2019 Registration: August 26, 2019 Camera-ready: August 26, 2019 *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: <u>http://www.iaria.org/format.html</u> [both LaTex and .doc templates]
- Before submission, please check and comply with the editorial rules: http://www.iaria.org/editorialrules.html
- More information on camera ready preparations will be posted after the paper notifications are sent out.

# 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+2019+Special Please select Track Preference as SKOSCyb

# 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 <a href="http://www.iaria.org/registration.html">http://www.iaria.org/registration.html</a>

# Contacts

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