SEMAPRO 2018

Forward

The Twelfth International Conference on Advances in Semantic Processing (SEMAPRO 2018), held between November 18, 2018 and November 22, 2018 in Athens, Greece, continued a series of events that were initiated considering the complexity of understanding and processing information. Semantic processing considers contextual dependencies and adds to the individually acquired knowledge emergent properties and understanding. Hardware and software support and platforms were developed for semantically enhanced information retrieval and interpretation. Searching for video, voice and speech [VVS] raises additional problems to specialized engines with respect to text search. Contextual searching and special patterns-based techniques are current solutions.

With the progress on ontology, web services, semantic social media, semantic web, deep web search /deep semantic web/, semantic deep web, semantic networking and semantic reasoning, SEMAPRO 2018 constituted the stage for the state-of-the-art on the most recent advances.

The conference had the following tracks:

- Basics on semantics
- Domain-oriented semantic applications
- Semantic applications/platforms/tools

We take here the opportunity to warmly thank all the members of the SEMAPRO 2018 technical program committee, as well as all the reviewers. The creation of such a high quality conference program would not have been possible without their involvement. We also kindly thank all the authors that dedicated much of their time and effort to contribute to SEMAPRO 2018. We truly believe that, thanks to all these efforts, the final conference program consisted of top quality contributions.

We also gratefully thank the members of the SEMAPRO 2018 organizing committee for their help in handling the logistics and for their work that made this professional meeting a success.

We hope that SEMAPRO 2018 was a successful international forum for the exchange of ideas and results between academia and industry and to promote further progress in the field of semantic processing. We also hope that Athens, Greece, provided a pleasant environment during the conference and everyone saved some time to enjoy the historic charm of the city.

SEMAPRO 2018 Chairs

SEMAPRO Steering Committee

Fabio Grandi, University of Bologna, Italy Tassilo Pellegrini, St. Pölten University of Applied Sciences, Austria Sandra Lovrenčić, University of Zagreb, Croatia Giuseppe Berio, Université de Bretagne Sud / IRISA, France Takahiro Kawamura, Japan Science and Technology Agency (JST), Japan Sule Yildirim Yayilgan, Gjøvik University College, Norway Michele Melchiori, Università degli Studi di Brescia, Italy Muhammad Javed, Cornell University, USA Wladyslaw Homenda, Warsaw University of Technology, Poland

SEMAPRO Industry/Research Advisory Committee

Enrico Francesconi, ITTIG-CNR / Publications Office of the EU, Italy Peera Pacharintanakul, TOT, Thailand Mari Wigham, Wageningen Food & Biobased Research, The Netherlands Raoul G. C. Schönhof, High Performance Computing Center Stuttgart (HLRS), Germany Raghava Mutharaju, GE Global Research, Niskayuna, USA Riccardo Albertoni, Istituto per la Matematica Applicata e Tecnologie Informatiche "Enrico Magenes" - Consiglio Nazionale delle Ricerche (IMATI-CNR), Italy Sofia Athenikos, Bank of America Merrill Lynch, USA Shun Hattori, Muroran Institute of Technology, Japan