



SPECIAL SESSION (SS2.3)

“Big Data Applications & Future Trends”

The continuous and significant growth of data together with better data access and the availability of powerful ICT systems led to intensified activities around Big Data Value. Powerful data techniques and tools allow collecting, storing, analysing, processing, and visualizing vast amounts of data. Open data initiatives gain momentum, providing broad access to data from the public sector, business and science (BDVA SRIA¹).

From the technological point of view, big data has 5 recognised challenges; in many cases known as the 5 Vs of Big Data², namely Volume, Variety, Velocity, Value and Veracity. Carefully designed cloud-enabled systems are needed in order to be able to integrate heterogeneous resources coming from different sources to ensure seamless and universal data access; a need that further increases the challenge from the technological point of view.

The state-of-the-art solutions are usually presented under the paradigm of high-performance computing (HPC), collaboration and integration amongst the various fragmented data types constituting the “big data stack”. Legitimate concerns can be raised to achieve cross-sector and multi-lingual data collaboration.

This has a significant impact on a wide range of domains, including maritime, transportation, healthcare, finance, and scientific computing. This special session envisages to bring together R&D research institutions and industries in the fields of analytics, machine learning, and high-performance computing.

We encourage both mature and positioning submissions describing systems, platforms, algorithms and its application to real life scenarios, addressing all facets of the application of machine learning and big data.

A panel on R&D opportunities for Big Data under the H2020 program will also be organized.

Target Attendees

- Academic and industry.

Chair:

- Dr. Carlos Agostinho (ca@uninova.pt), UNINOVA - GRIS, Portugal

Co-Chair:

- Dr. Ruben Costa (rddc@uninova.pt), UNINOVA - GRIS, Portugal

¹ http://www.bdva.eu/sites/default/files/EuropeanBigDataValuePartnership_SRIA__v3.pdf

² <http://enterprisearchitects.com/the-5v-s-of-big-data/>

Organizing Committee: