

Preface

The IWSG 2019 - 11th International Workshop on Science Gateways was held at the University of Ljubljana, Slovenia, from 12th to 14th June 2019. It brought together 32 researchers, scientists and developers from diverse research domains.

Science Gateways are a community-specific set of tools, applications, and data collections that are integrated together via a Web portal or a desktop application, providing access to resources and services of Distributed Computing Infrastructures (DCIs). Nowadays, computing resources that may be used in Science Gateways go beyond the usual Grid. Computing resources such as the hybrid Cloud (Cloud, Fog, Edge), the Internet of Things (IoT) and various off-the-shelf methods of Artificial Intelligence (AI) may be readily used for scientific applications. Additionally, technologies such as Blockchain and Smart Contracts may be used for secure aggregation of resources for scientific work at an unprecedented large scale.

Science Gateways offer the potential to open the utilisation of DCIs to wider audiences by providing a customised and easy to use user interface to access large computational and data resources. The complexity of the underlying infrastructure can be completely hidden from the end-users by a suitably tailored interface. As interest in Science Gateways has accelerated in the past few years, there is an increasing number of new user communities in practically all possible areas of scientific interest.

The workshop included three thought-provoking keynotes, presentations of 12 full papers reproduced in this issue, 11 short presentations and an open discussion. It showed intense engagement in a very wide range of research issues pertinent to science gateways such as novel approaches with AI, Edge Computing, enhanced data management and technologies as well as topics focusing on impact, metrics and sustainability. The use cases highlighted the aspect of science gateways as community-driven environments for researchers and educators.

The editors:

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For further information please visit the workshop website at:

<http://iwsg2019.crc.nd.edu/>

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