Preface

The concept of digital twins, as virtual replicas of physical entities, has gained significant traction in recent years in a range of domains such as industry, construction, energy, health or transport. Digital Twins can be used to view the status of the twinned physical object, without the need to interrogate the object itself. The digital twin can be queried by other software without the need to query the device itself thus relieving pressure on devices, which typically have very limited computational capabilities. Digital twins can also be used for monitoring and diagnostics to optimize device performance without impacting on the physical device.

Digital twins require unambiguous descriptions of both the entity and its digital counterpart, as well as the ability to integrate data from heterogeneous sources of information (including real-time data) and to interact with the physical world. Given these requirements, semantic technologies can play a significant role in the real-world deployment of digital twin technology.

The International Workshop on Semantic Digital Twins (SeDiT) was established to facilitate the progress of this emerging technology. Its aims are twofold. Firstly, to drive the discussion about current trends and future challenges of semantic digital twins. Secondly, to support communication and collaboration with the goal of aligning the various efforts within the community and accelerating innovation in the associated fields.

In this third edition of the workshop we received 6 submissions which underwent thorough reviewing by three reviewers each. Based on these reviews, we accepted 5 papers for presentation. We thank all authors and PC members for making the workshop a success.

We hope that SeDiT will be a fruitful meeting that will stimulate further developments in the field.

Hersonissos, Greece,
May 2022

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