Abstract

Recent years have seen a growing interest among users in the migration of their applications to the Cloud/Fog/Edge computing and Internet-of-Things environments. However, due to high complexity, Cloud/Fog/Edge-based and Internet-of-Things infrastructures need advanced components for supporting applications and advanced management techniques for increasing the efficiency. Adaptivity and autonomous learning abilities become extremely useful to support configuration and dynamic adaptation of these infrastructures to the changing needs of the users as well as to create adaptable applications. This self-adaptation ability is increasingly essential especially for non-expert managers as well as for application designers and developers with limited competences in tools for achieving this ability. Artificial intelligence is a set of techniques which greatly can improve both the creation of applications and the management of these infrastructures. This talk will discuss the use of artificial intelligence in supporting the creation of applications in cloud/fog/edge and IoT infrastructures as well as their use in the various aspects of infrastructure management.