International Conference on Sustainable Computing and Smart Systems, Coimbatore, India, 14-16 June 2023

An examination of virtualization technologies for enabling intelligent edge computing

Kevin Afachao[1], Adnan M. Abu-Mahfouz[1,2]

[1]Department of Electrical, Electronic and Computer Engineering
University of Pretoria, Pretoria, 0028, South Africa, u22851217@tuks.co.za

[2] Council for Scientific and Industrial Research (CSIR), Pretoria, 0083, South Africa
a.abumahfouz@ieee.org

https://ieeexplore.ieee.org/abstract/document/10169357

Abstract

The Internet of Things (IoT) is the cutting edge of computing technology that connects things and integrate them into large ecosystem. Recently, the Edge Computing architecture is driving the rapid development of the Internet of Things (IoT). While the Edge Computing framework has its own drawbacks, these may be mitigated by the application of Artificial Intelligence (AI) and virtualization technologies. This research study examines a number of publications and research surveys on enabling virtual services in Intelligent Edge Computing. Few research studies are dedicated to increasing the inclusion of virtualization in Intelligent Edge Computing. This research study briefly reviews the virtualization technologies and also discusses about the future research directions to promote more research in this field.