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AI enabled industrial internet of Things (AI-IloT) systems: An overview

Vishnu, S; Rajagopal, V; Kirubaraj, AA; Sirimella, P; Abu-Mahfouz, Adnan MI; Ramson, SRJ

Abstract

The Industrial Internet of Things (IIoT) plays a key role in transforming the traditional industrial infrastructure into a smart integrated framework through the amalgamation of physical entities and virtual entities. The integration of AI into the IIoT systems opened a new paradigm named AI-IIoT that enhanced the performance of IIoT systems through data centric insights, prognosis, adaptive actuation, and context aware automation. However, there are many critical challenges that prevents the large scale adoption of the AI-IIoT systems. This paper presents an overview of AI-IIoT systems focusing on its architecture, applications, challenges and future directions.

Index Terms—Industry 4.0, Internet of Things (IoT), Artificial Intelligence (AI), Industrial Internet of Things (IIoT).