Modern Random Access Protocol Optimization for Industrial IoT

High reliability and low latency requiring applications, namely Industrial IoT, (IIoT) cannot be supported by the current version of the mobile networks standard that is the 5G. 5G also known as New Radio, is currently on going through the standardization process and one of the critical topics is to support IIoT applications.

There are many solutions proposed for radio resource management to incorporate IIoT in 5G. Modern Random Access techniques are the most prominent solution for efficient radio resource management through use of interference cancellation.

In this work the main Modern Random Access algorithms are optimized for low number of users and high reliability and low latency constraints.

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