**ASSIGNMENT1: ARTICLE SUMMARY (ARTICLE - A survey on machine learning in Internet of Things: Algorithms, strategies, and applications)**

In the IoT and WSN era, to effectively run complex networks of connected objects, several challenges like topology changes, network congestion, coverage, scalability,etc need to be overcome. In the recent years, the development of Artificial Intelligence (AI) led to the emergence of Machine Learning (ML) which has become the key enabler to figure out solutions and learning models in an attempt to enhance the QoS parameters of IoT and WSNs.

WSN and IoT are considered as two of the most researched areas in the last decade. WSN and IoT technologies offer numerous advantages over conventional networking solutions, such as reliability, accuracy, lower costs, flexibility, and ease of deployment that enable their use in a wide range of diverse fields and applications.

There is an evergrowing increase in number of connected devices which enhances network coverage but also increases the size of collected data as well as computational complexity. The collaborative nature of WSN and IoT brings several advantages, including self-organization, flexibility, rapid deployment, and processing capacity but it also comes with several challenges and new techniques are required to overcome them.

Artificial Intelligence (AI) is a modern science for discovering patterns and making predictions from data based on statistics, data mining, pattern recognition, and predictive analytics. Machine Learning, which relates to the AI field, is a process of development, analysis and implementation leading to establish a systematic process. The iterative aspect of ML is interesting because they learn from previous calculations to produce dependable, repeatable decisions and results. ML aims to resolve issues in the WSN and IoT fields, by allowing the learning created on the experience and building models centred on an algorithmic kernel.

Parts of the survey:

1. Introduction to WSN and IoT's paradigms
2. Demonstration of the important ML's role to surmount challenges in these technologies
3. A comprehensive survey on the ML algorithms including four categories that are Supervised Learning, Unsupervised Learning, Semi-Supervised Learning, and the Reinforcement Learning
4. ML's algorithms are highlighted and its operating principle are explained
5. Discussion about the critical open issues in the ML tools and the promising future solutions
6. Conclusion