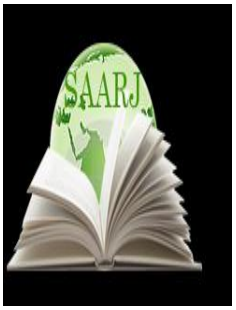

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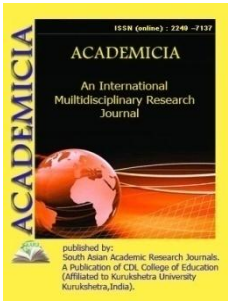

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AN OVERVIEW ON ISSUES AND ENABLING TECHNOLOGIES IN IOT MIDDLEWARE

Ms Anuska Sharma*

*SOEIT, Sanskriti University,
Mathura, Uttar Pradesh, INDIA
Email id: anushka@sanskriti.edu.in

ABSTRACT

The Internet of Things (IoT) enables humans and computers to learn from and interact with billions of items such as sensors, actuators, services, and other Internet-connected gadgets. The implementation of IoT technologies will allow for seamless integration of the cyber and physical worlds, radically altering and empowering human interaction with the planet. Middleware, which is generally defined as a software system intended to be the intermediate between IoT devices and applications, is a crucial technology in the implementation of IoT systems. In this article, we first demonstrate the necessity for an IoT middleware by demonstrating an IoT application for real-time blood alcohol level prediction utilizing wristwatch sensor data. After that, a survey of the capabilities of current IoT middleware is conducted. We also undertake a comprehensive examination of the difficulties and enabling technologies in creating IoT middleware that embraces the heterogeneity of IoT devices while still supporting the key components of composition, flexibility, and security in an IoT system.

KEYWORDS: *Internet of Things, Middleware, Privacy, Service Discovery, Security.*

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