

## **264. VERIFICATION ALGORITHM FOR DATA AGGREGATION IN MOBILE SENSING APPLICATIONS**

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The ability of mobile phones to do actions upon some sensitivity or event can be leveraged as wireless sensor nodes instead of deploying sensors exclusively for monitoring purpose. Sensor data aggregation assumes a trusted aggregator in mobile sensing applications. To ensure user privacy of the mobile user, the existing system uses homomorphic encryption in which the aggregator can only decrypt the sum of all users data. Other important issues such as data pollution or stealthy attacks in which malicious users may provide false data values to sway away the final aggregate statistics are not considered. To overcome the above mentioned problem, a novel lightweight verification system is proposed in which the base station can determine if the computed aggregate includes any false contribution.

Keywords: Homomorphic Encryption, Aggregator, stealthy Attacks.

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