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(57) Abstract :

The present disclosure relates to a system and method for privacy-preserving aggregation of time-series data using differential privacy. The system includes a processor to collect, via a data collection engine (212), time-series data from a plurality of computing devices. System add, via a noise generator engine (214), random noise to the collected data to obscure individual values from the collected data. The system is also configured to adjust, via a noise adjusting engine (216), a level of noise added to control a degree of privacy protection and aggregate, via an aggregate engine (218), the collected data to produce a data pattern while maintaining the privacy of the individual data points.

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