Fully Homomorphic Encryption Method, Program, and Apparatus

Stanford has patented a fully homomorphic encryption (FHE) method, computer program, and apparatus that grant the ability to outsource data processing without giving away access to the data. FHE keeps data private, but allows a worker that does not have the secret decryption key to compute (still encrypted) result of the data, even when the function of the data is very complex. In short, a third party can perform complicated processing of data without being able to see the data, making cloud computing compatible with privacy.

Applications

- Data encryption, processing, and cloud computing

Advantages

- Keeps data private while outsourcing the data processing
- Makes cloud computing compatible with privacy

Publications

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