

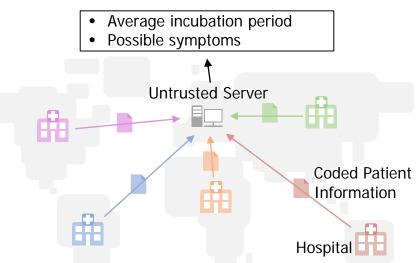
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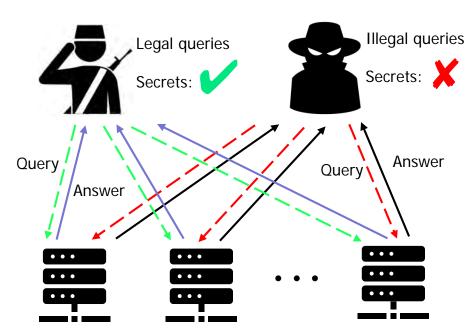
Algorithm/Protocol Design Through Information and Coding Theory

Secure Multiparty Computation



Pandemic statistics based on patients' information while privacy is preserved

Conditional Disclosure of Secrets



Goal:

 Provably efficient and privacy-preserving scalable protocols that minimize communication bandwidth and randomness consumption

More Applications: Private Information Retrieval, Secure Groupcast, Broadcast Encryption Coded Caching and Computation, Straggler Mitigation in Learning