CAREER: Secure and Privacy-assured Data Service Outsourcing in Cloud Computing



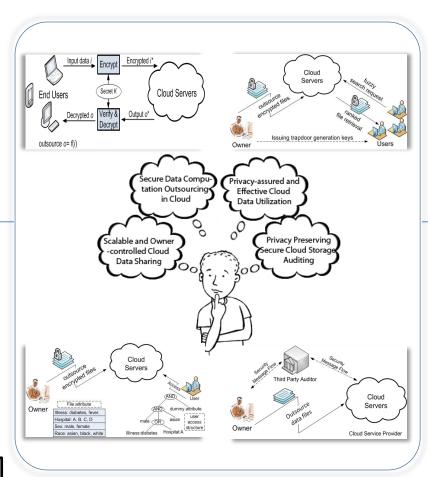
Challenge:

- Outsourcing data services deprives customers' direct control over the data.
- <u>Security</u> and <u>privacy</u> risks are the primary obstacles to the wide adoption of the cloud.

Solution:

- Deploying fundamental data services, including <u>computing</u>, <u>sharing</u>, <u>storage</u>, and <u>utilization</u>.
- Achieving balanced <u>security</u>, <u>usability</u>, and <u>scalability</u>.

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Scientific Impact:

 Exploring and developing privacy-assured cloud data utilization and computing, scalable and ownercontrolled cloud data sharing, and secure cloud storage mechanisms.

Broader Impact:

- Enabling cloud service providers to deliver value from the cloud infrastructure to both enterprise and individual customers <u>securely</u> and effectively.
- Developing diversified curriculum and research experiences for student from K-12 to the graduate level.