Secure Multi-Party Computation

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Abstract: *Secure Multi-Party Computation (MPC) enables multiple parties to jointly compute a function over their inputs while keeping those inputs private. This paper explores the principles, applications, and advancements in MPC. It discusses the challenges and opportunities in implementing secure computation protocols and presents a comprehensive review of existing literature. The research methodology includes an analysis of various MPC techniques and their suitability for different scenarios. The study concludes with insights into the future directions of MPC and its potential impact on privacy-preserving technologies*

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