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# IEEE Recommended Practice for Secure Multi-Party Computation

STANDARDS

IEEE Computer Society

Developed by the
Standards Activities Board Committee

**IEEE Std 2842™-2021**

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Developed by the

**Standards Activities Board Committee**
of the
**IEEE Computer Society**

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**Abstract:** Data has become one of the most important assets in ICT area. Secure multi-party computation plays a very important role in balancing data usage and data protection. It could build trust and security in data collaboration and big data analysis related areas. A technical framework for secure multi-party computation is provided in this standard, including specifying the following: an overview of secure multi-party computation; a technical framework of secure multi-party computation; security levels of secure multi-party computation; and use cases based on secure multi-party computation.

**Keywords:** IEEE 2842™, MPC, secure multi-party computation, technical framework

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