

# Chapter 1: Introduction

## Authentication Technologies for Cloud Computing, IoT and Big Data

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### ABSTRACT

Authentication is central to any security issue, involving the verification process of the identity of a person or a process to access a secured system. Therefore, authentication is extremely important to guarantee the smooth flow of information without troubles. Authentication process is implemented for data in storage and data in-transit with communication network. Critical systems, e.g., energy, banking and finance, defense, transportation, business process, manufacturing, water system, and emergency services heavily rely on information systems and networks. Authentication has become an integrated part of modern computing and communication technologies, e.g., Internet of Things (IoT), cloud computing, and connected vehicles. This chapter provides an overview of the book, its theme, and purpose by introducing the topics of the book that presents the current technological advances and the new trends in authentication in information security.

### Chapter Contents:

- 1.1 Basic terminologies and motivation
- 1.2 Overview of the book chapters
- References

**KEYWORDS:** Message authentication; cloud computing; Big Data; Internet of Things

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