

Cryptography

Past, Present and Future

Imad Fakhri Taha Al Shaikhli

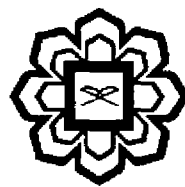


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Cryptography: Past, Present and Future

Imad Fakhri Taha Al Shaikhli



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- Nur Dalilah Bt More Yusoff
- Nur Khairunnisa Bt Juara

ABSTRACT

In this article we will talk about the background of Feige-Fiat-Shamir Identification Scheme. Also we will introduce into FFS Initial Phase and FFS Identification Phase. Moreover, we will describe the advantages and disadvantages.

BACKGROUND

Feige-Fiat-Shamir (FFS) identification scheme was first introduced in 1988 by Uriel Feige, Amos Fiat and Adi Shamir is the best-known zero-knowledge proofs of identity. FFS is improvement of Fiat-Shamir Protocol where it poses multiple challenges per iteration rather than only a single one-bit challenge per iteration in the previous scheme. The objective of zero-knowledge proofs of identity is for a prover, Peggy to identify herself to a verifier, Victor by proving she possesses knowledge of a secret associated with her identity without disclosing any secret information to Victor. FFS makes use of public-private key pairs where the security relies on the difficulty of extracting square roots modulo large composite integers n of unknown factorization, which is equivalent to factoring n . (Sahai, & Vadhan, 2003)

IMPLEMENTATION PHASE

The implementation phase of FFS is divided into 2 phases, initial and identification phase.