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Encryption using True Random Number

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Abstract: In moment's connected digital geography, data security and sequestration have come consummate enterprises. Traditional encryption ways frequently calculate on mock arbitrary number creators (PRNGs) to induce encryption keys, which are deterministic and vulnerable to attacks. This design proposes a new approach to enhance data encryption by exercising true arbitrary number creators (TRNGs) for generating encryption keys. In this work, a secure optic ultrafast arbitrary number creator grounded on arbitrary ray gamut's was demonstrated. Unlike the usual system of recording ray intensity over time, the arbitrary ray diapason under each pump palpitation was recorded and converted into arbitrary figures through post-processing. Approaches in three different confines — space, diapason and time were used to increase the rate of arbitrary number generation. The randomness of performing arbitrary bit aqueducts was vindicated by the NIST statistics tests.

Keywords: encryption

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