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DIGITAL DATA ENCRYPTION USING MODIFIED METHOD FOR POINT OPERATIONS IN ECC USING MATLAB

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ABSTRACT

In recent years, Data security has become a priority for any successful information system that can be relied upon to secure its private data in the digital world around us. This depends on the strength of the technique used to secure these data. Elliptic curve cryptography (ECC) has gained Elliptic Curve Cryptography has gained great fame in the field of encryption and security of information because of its strength and speed in data encryption and is what led him to include it in the international standards for information security. A new technique is surveyed to perform point operations multiplication, addition and doubling using MATLAB. The New technique depends on calculating the mathematical expression of point addition and doubling in a faster way. Images and text are the data used to apply the ECC's new technique and the results were satisfactory.

KEYWORDS: Encryption, ECC, Decryptions, Point Operation, Point Addition, Point Doubling and Public Key