Breaking RSA Encryption

Grant Haataja

November 6, 2019

1/5

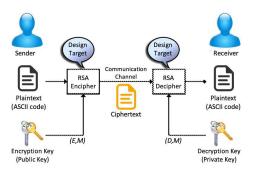
WHAT IS RSA ENCRYPTION?

RSA encryption is a public-key cryptographic scheme which means the encryption key is not a secret, but individual users all have their own secret decryption key.



How does RSA work?

RSA encryption uses extremely large numbers and one-way functions to easily encipher messages in a way that is almost impossible to reverse without the specific, secret decryption key.



Brute force method

Trying to break RSA encryption using brute force method would take years.



QUANTUM METHOD

Although only theoretical currently, Quantum computing presents a relatively straightforward method to breaking RSA encryption.

