

CSCI 357 - Cryptography

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HW #7 - One-Time Pad Implementation

First, to generate a random key, I randomly choose n integers in $[0, 1]$, where n is the desired key size. Then, I join this list to become a string, and encode it as utf-8.

To perform the bitwise XOR, I use the zip function to iterate over both strings at once, and use the XOR operator \wedge on each byte, returning the result as a new bytes array.

Since this encryption is symmetric, the same bitwise xor function is used to decrypt.