

Cryptographic index

Description

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To introduce cryptography as a theme in my Media and Culture class I provided each student with a customised string of code containing the name of an AI-themed film. The key to decode the secret message was the studentâ??s unique 7 digit university identification number. If the encrypted string is **uaroulojz** and the student key (ID) is **2415233**, then count along the alphabet for each letter by the number in the corresponding key position. So, u+2=w, a+4=e, r+1=s, etc. If the plain text is longer than the key then repeat the key sequence for the rest of the string. Also loop the 26 letters of the alphabet, so that z+1=a, etc. The movie name **uaroulojz** decodes to **westworld**. This method of encryption is a simplified version of standard public key encryption that deploys extremely long binary encryption keys operating on binary files.

Once I created the spreadsheet to automate the process of encrypting a list of plaintext entries I thought I would apply this method of encryption to any arbitrary list of words. What better to illustrate the method than an index for my soon-to-be-released book on encryption in architecture: *Cryptographic City: Decoding the Smart Metropolis*, with MIT Press.

Iâ??ve separated each index entry by â??|â?•. The key for the first entry in this list is 1984. For the second entry the key is 1985; for the third it is 1986 and so on. The key for the final item on this list is 2054. As long as the recipient knows the rule, such a method of changing the key throughout a message is one way of confounding potential codebreakers. Itâ??s harder to detect patterns. Here is the list of the book index entries that start with A. Iâ??ve removed page numbers, spaces and punctuation, and have changed all entries to lower case.

ztuarjaxhcapx | ztlduvezzjmmdj | ztlozkgl | zufttjwtl | zunsmtwvdeujxglaneklzevsqu | zunvqkajdi | zwwoqurnbv | rgrshrc | tisym | zwkbqczcd | zxvkekyadecefykamdvjs | zxfi | zyrgndvhs | zikbeztbzczgsvcehxvgbv | zzitms | zcsvqkzcdfeszkkzrkr | ylchcmy | ylgnpitgksedylsnaodd | yndzgas | yndyjochahaflvaigdaqgon | yndzytadyrvaqtije | yndgybymgntc | yndgychclelyyrnclg | yndgsanvc | yndhsblaakeqcncjwptamn | yndiccuiqioe | yncssbrtgtttgomcgpgep | beehlishmn | farf | sbhnsisvmf | ylodybdpqedwjsnymumpgnf | ylsocxs | ylslgggn | ylsvmim | ymrlcrcsk | ynziahhjr |

ynriarwproerypfy | ypgznpjhaarhmnnqmgpzkmgmeil | ypn | yryygc | yradgtcyrupaqecwjsmwjbcnrij | ynbveol | ynbuqscgzlw | ynbusreeyrw | ynbumljsee | ynbtmnavylkvlt | ynacpymtmgoanhfcaiqy | ynacggfsyljdbix | ynadpebkysllpy | ynadpiap | ynahyndqygb | ynahctxwmlfnrszcmoi | ynahccoiarxww | ynahpidbls | ynagpnxecnq | ynagmrqrzlbkwpb | ynzppacmytesk | ynzrccndrskbgephcs | ynzqggjyrunc | ynzpwmxlj | ynzppuop | ysyppapjp | zanioua | mrctliy | yrekropdc | yrekfmkxpaidytet | yrhymfohgeqeqfdlk | ysxhgsodpejfpah | yuofcnogaaogmn | yuolbenh | yuokqtzncobnymharrt

Decoded, the entries are as follows.

accessibility | activemeasures | actuator | adnauseam | advancedencryptionstandard | advertiser | affordance | spatial | urban | afterlife | ageoftheenlightenment | agon | ahamoment | artificialintelligence | airbnb | albertileonbattista | alchemy | algorithmseealsocode | andbias | andblockchainvalidation | anddataharvesting | andlabyrinth | andmachinelearning | andnuance | andpublickeyencryption | andrecursion | andsubstitutioncipher | definition | hash | ubiquityof | alphabetseealsocounting | alttext | altright | altcoin | amsterdam | anarchist | anticryptography | apiapplicationprogramminginterface | app | arabic | architectureseealsoalbertileonbattistaborgesjorgeluislecorbusierloosadolfsoanejohnsubarchitecturew | andagon | andassembly | andburglary | andcollage | andconcealment | andcryptographiccity | anddigitalmedia | andfreemasonry | andgrids | andlanguage | andmetabolistschool | andnecrocracy | andorigins | andornament | andportabletype | andpragmatism | andsecretsocieties | andsignature | andsymbol | andtrust | ascurator | baroque | organic | aristotle | arithmogrammatic | armyofthievesfilm | asciistereogram | authentication | autodesk | autostereogrammetry

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Thatâ??s still a bit *cryptic*. So here are the index entries for the As unencrypted, prior to proofing by the editor.

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The book comes out in Spring 2023. Iâ??ll provide further details in a post that follows. In the mean time **fvucyvcpwhdppyafpdrrkaq** (key: 25122022).

Reference

- Coyne, Richard. *Cryptographic City: Decoding the Smart Metropolis*. Cambridge, MA: MIT Press, 2023 (Spring).

Note

- The featured image is a fictional Midjourney render prompted by â??cryptographic book index page.â?•

Category

1. Uncategorized

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