

Post-Science Encryption (PSE)

The Post-Science Encryption is the solution for encryption based on the post-science solution of complete automation and can be developed in a few weeks. The purpose of developing Post-Science Encryption is to clearly illustrate the technical innovations of the completely automated Universal Permanent Software with a product which can be immediately used. The product can be developed quickly because Post-Science Encryption is just Universal Permanent Software without its screen display. It can be developed by simply stripping down its user interface. The solution of completely automated software is also the solution of encryption. Post-Science Encryption (PSE) is technically related to auto-update capability of the completely automated software. Encryption is just changing one number to another number and changing it back. Auto-update changes, say, 371, to, say, 111. The two statements, which changes 371 to 111 and changes 111 to 371, are:

64880 PRINT#1 "111"

64480 PRINT#1 "371"

where 64880 is the ADDRESS where the same operation is performed. The trick is to generate the above two statement automatically. And the difficulty is to have the computer, not the human user, to remember the ADDRESS 64880. Also, the computer code or plain and cipher text should be expressed in integers, such as 111 and 371. For encryption purpose, for example, all text should be converted to ASCII numbers before being encrypted. The code to be updated or encrypted is fed into tree structured numerical multiple-choice questions, which need no explanations. The completely automated software system is a universal scrambler, which can automatically make any lock and the corresponding key.

The Self-generating Software System (SSS) is by itself a breakthrough in knowledge, because software will become the dominant form of knowledge when knowledge experts without the knowledge of computer programming can interact easily with the computer. Software automates knowledge. Software automation automates software. Finally SSS automates software completely. In the terminology of SSS, Post-Science Encryption can be further simplified as:

371 If Flag=1 Then N=371 Else N=111

Generally,

Address If Flag=1 Then N=Address Else N=Path

If Flag= 1, Then N =Address Else N =Path (e.g. 111, 371)

This plan is a humble beginning of the execution of the grand world visions of Prof. Lofti A. Zadeh, Prof. Chitoor V. Ramamoorthy, and Dr. Tosiyasu L. Kunii. The execution will be carried out by Dr. Hugh Ching, Prof. Chien Yi Lee and others. Prof. Zadeh is the originator of Computing with Words based on fuzzy logic and the Theory of Perception. Prof. Ramamoorthy is the founder of Software Engineering and the life-time advocator of the discipline in software design. Dr. Kunii is the founder of Cyberworld based on Homotopy Theory and other graphics theory. He is the originator of Cellular Data System (CDS) based on his Incremental Modular Abstraction Hierarchy (IMAH). His study of homotopy contributes to the solution of encryption. The Post-Science Encryption (PSE) will give a skeleton, yet complete, view of the technology of complete automation, which is the central theme of this plan.

In practice, the plaintext and the text in the airwave can be known to the sender. There are two equations and two variables, namely, the plaintext and the airwave text. To make the problem unsolvable by an attacker is to introduce another text unknown to the user and to be mixed with the plaintext, to make the system to be three variables and two equations. For example, the plaintext 111 is added to the random text 119 unknown to the user, retaining only the lowest digits, to become 119220, which is then scrambled by the lock to get, say, 348204. The attacker can find out 111 and 348204, but not 119, nor 119220; the unknown equation is random text = 119, which can be from other schemes.