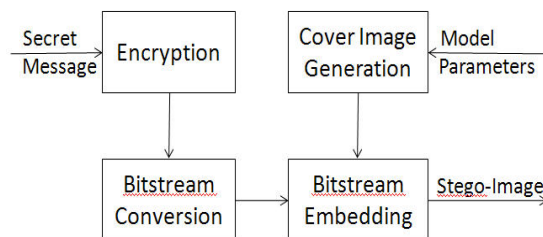


## Project of Information Hiding

Internet has become the most popular way for communication and information broadcast. Most of the Internet users either satisfy or ignore the current security and privacy of communication over network transmission until their information is stolen or misused. Thus motivated, data hiding plays an important role recently. On the other hand, the cost of storage space is significantly dropped and the bandwidth of network is good enough to transmit an image that recalls the adoption of an ancient methodology, steganography, to serve as an act of covert communication.

This project aims to develop a simple and secure data hiding system based on the following flowchart. This novel steganographic framework has two distinct properties: (1) the secret message, for example, personal ID, bank account numbers etc., are first encrypted by using simple algorithms like Hill ciphers or random permutations. The goal is to raise the security level, (2) the cover image is chosen from artificial microarray image templates or texture images synthesized from Markov random fields. The advantage is that we can easily generate these cover images to fit the various sizes of secret messages. This project wants to finish a set of C/C++ or Matlab programs for data hiding according to the following flowchart.



**Figure 1.** A Flowchart of Proposed Data Hiding Scheme.

### Reference

C.C. Chen and W.J. Lai, "High-Capacity Steganography Using MRF\_Synthesized Cover Images", *Annual Conference on Engineering and Information Technology, Tokyo, March 28-30*, 237-242, 2014.