

The topic of this thesis is a triangulation algorithm and its use in cryptanalysis.

First of all we will define a non-linear equation system on which we can apply triangulation algorithm and we will explain what its output is. Then we will demonstrate its application in cryptanalysis, more specifically during the attack on the Rijndael cipher. We will illustrate this attack by a search of collision for our hash function, created for this purpose in Davies-Meyer mode using Rijndael cipher

This thesis also contains a practical part in which we will demonstrate the search of collision for our hash function mentioned before.