ABSTRACT

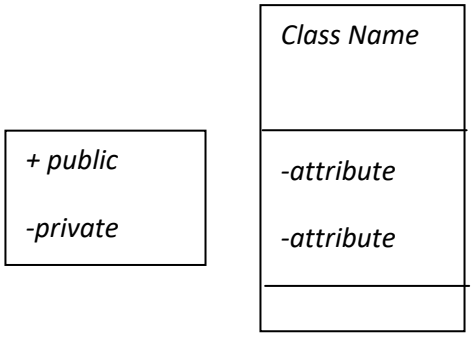
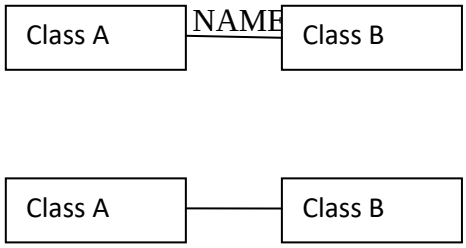
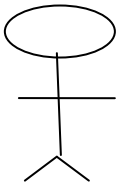
In steganography, the distortion purpose is used to explain the modification cost on cover elements ,which are definitely crucial to the security of current adaptive steganography. There are several successful rules for reassigning the cost defined by a given distortion function, which can promote the security stage of the corresponding steganographic algorithm. In this project,a novel cost reassignment rule that is implemented to not one but a batch of present distortion functions. The costs assigned on a few pixels by several steganographic strategies may be very dissimilar even though those strategies exhibit close security levels. Such pixels are named as "controversial pixel". Results display that steganalysis features are unresponsive to those pixels, therefore these pixels are appropriate to hold extra payloads.This rule named as the Controversial Pixels Prior (CPP) rule. The thumb rule, recommends a cost reassignment scheme. Through extensive experiments on several types of stego algorithms, steganalysis features and cover databases, which exhibits that the CPP rule can enhance the security of state-of-the-art steganographic algorithms for spatial snapshots.

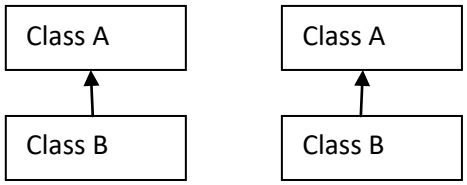
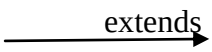
Keywords:

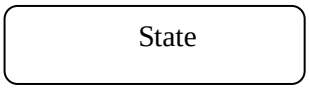
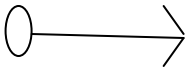
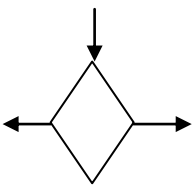
Steganography, Distortion, Security, Cost reassignment, Controversial pixel, Payloads, Stego algorithms, Steganalysis, databases.

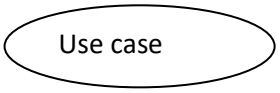
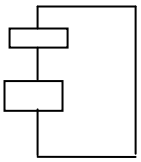
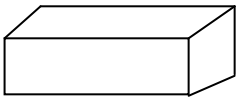
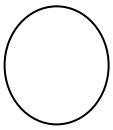
LIST OF FIGURES

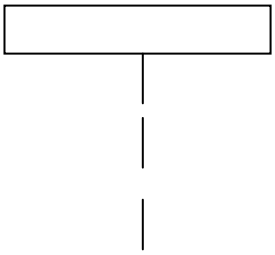
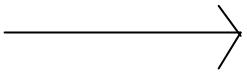
LIST OF SYSMBOLS

S.NO	NOTATION NAME	NOTATION	DESCRIPTION
1.	Class		Represents a collection of similar entities grouped together.
2.	Association		Associations represent static relationships between classes. Roles represent the way the two classes see each other.
3.	Actor		It aggregates several classes into a single classes.

5.	Aggregation		Interaction between the system and external environment
5.	*Relation* (uses)	*uses*	Used for additional process communication.
6.	Relation (extends)		Extends relationship is used when one use case is similar to another use case but does a bit more.

7.	Communication		Communication between various use cases.
8.	State		State of the process.
9.	Initial State		Initial state of the object
10.	Final state		F final state of the object
11.	Control flow		Represents various control flow between the states.
12.	Decision box		Represents decision making process from a constraint

13.	Usecase		Interaction between the system and external environment.
14.	Component		Represents physical modules which are a collection of components.
15.	Node		Represents physical modules which are a collection of components.
16.	Data Process/State		A circle in DFD represents a state or process which has been triggered due to some event or action.
17.	External entity		Represents external entities such as keyboard, sensors, etc .

18.	Transition		Represents communication that occurs between processes.
19.	Object Lifeline		Represents the vertical dimensions that the object communications.
20.	Message	Message 	Represents the message exchanged.

LIST OF ABBREVATIONS

S.NO	ABBREVATION	EXPANSION
1.	RDH	Reversible Data Hiding
2.	CPP	Controversial Pixel Prior
3.	UNIWARD	Universal Wavelet Relative Distortion
4.	MVG	Multivariate Generalized Gaussian
5.	SRM	Spatial Rich Models
6.	SMD	Synchronizing Modification Direction
7.	SPAM	Subtractive Pixel Adjacency Matrix

LIST OF TABLES