Steganosaurus a video steganography project

IS STEGRNOGRAPHY

Steganography is the art and science of sending covert messages. The word steganography is Greek in origin and is derived from the words, *steganos*, meaning covered or secret, and graphia, meaning writing.

Steganography has been used for thousands of years, however in the last two decades steganographic techniques have been revolutionised by the new area of digital steganography.

Of the steganography software currently available, 52% hides data in images, 15% hides data in audio, 30% use other techniques and only 3% hide data in video.



The aim of my project was to develop motion-vector based methods for hiding data in video.

H.264 VIDEO CODING

This figure provides an overview of the basic structure of H.264. The implemented steganographic techiques had to compensate for the quantisation and coding of motion vector values.



The embedding process had to tolerate operations such as bit shifts that would manipulate any system modifications to the motion vector values as part of the final coding process.

ODUCTION: VIDEO STRUCTURE

A video file is often a container for an audio and video A A V A V V

C	ontainer File
	Audio Stream
	Video Stream
	Data Stream

stream, however, video files can contain multiple audio/video streams and additional data streams. The data from the different streams are multiplexed within the video file. Packets of data from different streams can be multiplexed in any order. For some contexts, such as online streaming, multiplexing should be controlled to minimise the amount of data that has to be buffered in one go.

Typical video multiplexing:								
	А	Α	V	Α	V	V	А	
Optimised for streaming:								
	Α	V	Α	V	Α	V	A	





Download our Video Steganography software: http://www.steganosaur.us



Video Steganography by James Ridgway Supervised by Dr Mike Stannett