## Contents

Abstract								
So	omma	ario		iii				
Co	onter	$_{ m nts}$		iv				
In	$\mathbf{trod}$	uction		1				
1	Sta	te of t	he Art	4				
	1.1	Introd	luction to Multimedia Forensics	4				
		1.1.1	Applications	7				
		1.1.2	Tools	7				
	1.2	Forens	sic Analysis of Video File Container	8				
		1.2.1	Video File Containers	8				
		1.2.2	Applications for Video File Container Analysis	12				
2	Video File Formats							
	2.1	Box D	Definitions	15				
		2.1.1	First Level	15				
		2.1.2	Second Level	19				
		2.1.3	Third Level	21				
		2.1.4	Forth Level	22				
		2.1.5	Fifth Level	25				
		2.1.6	Sixth Level	26				
3	Pro	$\mathbf{posed}$	Approach	27				
	3.1	Overv	iew	27				

CONTENTS		7

	3.2	Video Format Tool	30				
		3.2.1 Features	30				
		3.2.2 Implementation	32				
		3.2.3 Command Line Examples	39				
	3.3	File Origin Analysis Tool	40				
		3.3.1 Features	40				
		3.3.2 Implementation	41				
		3.3.3 Command Line Examples	46				
	3.4	Web Application	47				
		3.4.1 Features	47				
4	4 Experiments and results						
	4.1	Dataset	52				
	4.2	Integrity Verification based on File Container	52				
		4.2.1 Ffmpeg	55				
		4.2.2 Exiftool	55				
	4.3	Application on Social Network	59				
	4.4	Source Identification based on File Container	61				
$\mathbf{C}$	Conclusions						
В	Bibliography						
$\mathbf{A}$	Acknowledgements						