# Scott Williams

COMPUTER SCIENCE PART II PROJECT DISSERTATION

# STEGANOGRAPHIC FILE SYSTEMS WITHIN VIDEO FILES

Christ's College University of Cambridge

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### **Performa**

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College: Christ's

PROJECT TITLE: Steganographic filesystems within video files EXAMINATION: Part II of the Computer Science Tripos

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PROJECT SUPERVISOR: Daniel Thomas

# **Original Aims of the Project**

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# **Work Completed**

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# **Special Difficulties**

None.

Declaration of Originality			
I, Scott Williams of Christ's College, being a candidate for Part II of the Computer Science Tripos, hereby declare that this dissertation and the work described in it are my own work, unaided except as may be specified below, and that the dissertation does not contain material that has already been used to any substantial extent for a comparable purpose.			
I give permission for my dissertation to be made available in the archive area of the Laboratory's website.			
Signed:			
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# 1 Introduction

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#### 1.1 Motivation

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# 2 Preparation

## 2.1 Background

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#### 2.1.1 Preliminaries

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- 2.1.2 AVI encoding
- 2.1.3 JPEG compression
- 2.2 Existing tools
- 2.3 Choice of Languages and Tools
- 2.4 Requirements Analysis
- 2.4.1 Core Requirements
- 2.4.2 Possible Extensions

# 3 Implementation

- 3.1 Introduction
- 3.2 Filesystem
- 3.3 Steganographic Algorithms
- 3.4 Extensions

# 4 Evaluation

- 4.1 Satisfaction of Requirements
- 4.2 Correctness
- 4.3 Security
- 4.4 Performance

# 5 Conclusions

5.1 Future Project Directions

# References

[1] Steganography in Digital Media. Jessica Fridrich, 2010.