University of Cambridge

Computer Science Tripos

Part II Project

Time-Lapse Based Weather Classification

Author:
Roman Kolacz

Supervisor:
Advait Sarka

March 19, 2015

Proforma

Name:	Roman Kolacz
College:	Downing College
Project Title:	TIme-Lapse Based Weather Classification
Examination:	Computer Science Tripos - Part II
Word Count:	
Project Originator:	Alan Blackwell
Project Supervisor:	Advait Sarkar

Initial Project Aims

Summary of Work Completed

Decleration of Originality

I, Roman Kolacz of Downing College, being a candidate for Part II of the Computer Science Tripos, hereby declare that this disseration and the work described in it are my own work, unaided except as may be specified below, and that the disseration does not contain material that has aready been used to any substantial extent for a comparable purpose.

Signed:

Date:

Acknowledgements

Contents

List of Figures

Chapter 1

Introduction

1.1 Aims

1.2 Challenges

1.3 Related Work

Chapter 2

Preparation

2.1 Requirements Analysis

Software/Hardware

2.2 Data Gathering

Raspberry pi, camera, forecast, etc

2.3 Time Lapse

2.4 Machine Learning

As in, what it is, really.

2.5 Choice of Tools

Backup/eclipse/vim/weka/forecast?

Chapter 3

Implementation

3.1 Machine Learning

How we used it, to contrast with the Preperation.Machine Learning section. Subsections for types add diagrams

3.2 Gathering Image Data

csv files

3.3 Sanity Checking

Chapter 4

Evaluation

4.1 Results

Summary of overall results/accuracy, etc?

4.2 Cross Validation

4.3 Analysis of Classifiers

Which ones are better at what [1]

Chapter 5

Conclusions

5.1 Results

5.2 Future Work

Extensions, etc?

5.3 Changes

Could be merged with above?

Bibliography

[1] Roman. Something, 2015.5.

Chapter 6

Appendices

Chapter 7

Proposal