

One-Class Approaches for Object Extraction in Images

by

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ABSTRACT

This is my abstract

DEDICATION

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Chapter 1

INTRODUCTION

1.1 Motivation

1.2 Problem Statement

We address the problem of classification/ object extraction when only positive samples are labeled. Let us start by establishing some notation: Let

Then the problem can be stated as follows: we are **given** X and our **aim** is Y

1.3 Objective

The aim of this work is to evaluate methods that may solve the one-class extraction problem in the context of aerial imagery, particularly when applied to feature extraction problems such as the task of locating all image patches that contain vehicles in a large image.

1.4 Contributions

We make the following contributions:

- (A contribution involving the application of this approach to cars?)
- Contribution 2
- Contribution 3 (always 3)

Chapter 2

RELATED WORK

The topic of one-class machine learning has been covered by the survey paper Khan and Madden (2010, 2014).

Chapter 3

THEORY

Chapter 4

IMPLEMENTATION

Chapter 5

EVALUATION AND RESULTS

Table 5.1: Recall on 50% of the labeled data when trained using increasing amounts of data.

	10%	20%	30%	40%	50%
1C-SVM, Chen <i>et al.</i> (2001)					
Method2					
Method3					

Chapter 6

CONCLUSION AND FUTURE WORK

REFERENCES

- Chen, Y., X. S. Zhou and T. S. Huang, “One-class svm for learning in image retrieval”, in “Image Processing, 2001. Proceedings. 2001 International Conference on”, vol. 1, pp. 34–37 (IEEE, 2001).
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APPENDIX A
RAW DATA

BIOGRAPHICAL SKETCH