**Report**

**Collision Detection**

**University of Minho**

**Master in Informatics Engineering**

Computer Graphics

Image Processing and Computer Vision

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# Abstract

Resumo final do trabalho.---------------------------------------------

# Introduction

The objective of this work assignment was to detect general movement in a video, with one or more objects. This movement consists in travels from one side to the other of the screen, collision with the camera and approaching/receding objects.

For this task a script was developed in MatLab 2015 which reads a video, detects its background and starts detecting and tracking an object. Finally it studies its route do determine which type of movement described before is the object performing. The results are then printed on the console output, in real time.

# Object Tracking

Algoritmo tirado da net… blab la bla--------------------------------------

# Collision Detection

Falar do nossos algoritmo…---------------------------------------------------

# Conclusion

Sucesso na maioria dos casos de teste

Referir que em certos casos pode detetar movimento que não acontece (afastamentos e assim)

Referir frames insuficientes em alguns videos

Referir necessidade de frames de aprendizagem para deteção de background

# References

http://www.mathworks.com/help/vision/examples/motion-based-multiple-object-tracking.html

<http://www.mathworks.com/products/computer-vision/>