National Research University Higher School of Economics

Faculty of Business Informatics School of Software Engineering Software Management Department

BASED ON LUCAS-KANADE ALGORITHM OBJECT DYNAMIC IDENTIFICATION APPLICATION

Student: Kostenko Dmitry

Group: 472SE

Argument Consultant: Prof. Ivan. M. Gostev, PhD

Style and Language Consultant: Tatiana A. Stepantsova

Abstract

Computer vision is a dynamic scientific discipline. One of the most important objectives of the computer vision is real-time object tracking. A basis of the developed algorithm is the differential local method of Lucas and Kanade [1]. This method allows to keep track of point features in the frame sequence. The aim of this degree work is to develop a program that implements this functionality: able to read a video-stream from a laptop's built-in camera, in the presence of a human hand on the frame, program will display the number of unbent fingers.

Contents

Introduction		•	 	•	•					•							•	•				4
Main body	•	•	 		•		•	•			٠	•			•	 		•				5
Conclusion			 													 						6

Introduction

1-2 pages adssdadas

Main body

5 pages

Conclusion

1 pages

Bibliography

[1] Takeo Kanade Bruce D. Lucas. An Iterative Image Registration Technique with an Application to Stereo Vision. Computer Science Department Carnegie-Mellon Universit, Pittsburgh, Pennsylvania 15213, 1981.