"ALEXANDRU IOAN CUZA" UNIVERSITY OF IAȘI

FACULTY OF COMPUTER SCIENCE



MASTER'S DEGREE

Human Gait Recognition

proposed by

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Session: July, 2019

Scientific Coordinator

Lect. Dr. Ignat Anca

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1 Introduction

Gait is the movement pattern of the limbs during walking over a solid surface. It varies based on speed, terrain, maneuvering or efficiency of energy. This movement is unique for each human and can be used for recognizing persons from afar, without the need of their cooperation or physical contact, whereas fingerprint, iris or facial do need the physical access or their cooperation [1].

There are three main categories in which recognition could be classified, Machine Vision (MV), floor sensors and wearable sensors. MV is preferred because it is effective in continuous authentication and is the most non-intrusive approach.

We will create a system for human gait recognition using machine Vision and Convolutional Neural Networks, that accept a series of frames with the person walking.

2 Contributions

3 State of the Art

Human gait is the movement pattern of the limbs during walking. It can vary depending on the persons age, weight, how tired he is, if he is carrying extra weight and if he has loose clothing.

4 Approach

5 Conclusions

6 Bibliography

Bibliografie

[1] H. Srivastava, "A comparison based study on biometrics for human recognition," *IOSR Journal of Computer Engineering*, vol. 15(1), pp. 22–29, 2013.