MC936B/MO826R
Introduction to Biometrics
INSTITUTE OF COMPUTING — UNICAMP
2ND SEMESTER, 2015
Prof.: Anderson Rocha
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Course Description

Days and Times

<table>
<thead>
<tr>
<th>Class</th>
<th>Day</th>
<th>Time</th>
<th>Room</th>
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</thead>
<tbody>
<tr>
<td>Every</td>
<td>Thursdays</td>
<td>19 – 20:40</td>
<td>CB17</td>
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<tr>
<td>Fridays</td>
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<td>21 – 22:40</td>
<td>CB02</td>
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Extra-class aid

Students whom need extra-class help from the professor must send an e-mail with 24 hours in anticipation. However, every week an extra-class option will be available and broadly released to the class. Normally, this extra-class aid will take place on Wednesdays @18:00 through @20:00.

Evaluation

This class will be evaluated according to the following criteria:

1. **Individual practical assignments** in which the professor gives the problems and specs to the students. Short technical reports must be turned in. The solved problems in the practical assignments may be part of the final evaluation (written) test. Do not miss them.
   
   Weight: 3 × 20% of the final grade. The implementation language is free of choice.

2. **Class discussions** in which the professor and students discuss problems in Biometrics.
   
   Weight: 10% of the final grade.

3. **One seminar.** Weight: 30% of final grade.
   
   - This assignment must be done in groups of two people and refers to the presentation of a biometric topic/paper to the class.

Exam

- This discipline does not have an extra exam after the end of the semester.

Syllabus

1. Introduction to Biometrics
2. Verification vs. Identification
3. Error types
4. Applications
5. Face Localization
6. Face Recognition
7. Fingerprint Recognition
8. Iris Recognition
9. Additional Biometric Treats (ears, gait, hand, soft biometrics)
10. Spoofing
11. Multibiometrics

Programming Language
It is recommended that the students use a Machine Learning friendly language such as R, Python or Matlab to make the development easier and faster. However, the implementation language is free of choice.

Webpage
http://www.ic.unicamp.br/~rocha/teaching/2015s2/mo826

Bibliography
There is no specific book/reference for this discipline. All necessary materials will be recommended according to the subject of interest. However, the list below may be of interest.

Books

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