UNIVERSITÀ DEGLI STUDI DI PADOVA

DIPARTIMENTO DI INGEGNERIA DELL'INFORMAZIONE

DIGITAL FORESICS AND BIOMETRICS
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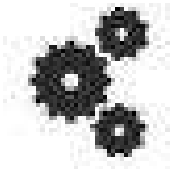
AVAILABLE PROJECTS & REPORTS

INFO & LEGEND



Machine learning related

Deep-learning related

Possible topic for thesis

- The project will be **assigned by the lecturer** (in order to be considered valid).
- Please **communicate project preferences and groups in advance using the appropriate forms on the moodle page of the course**. Only one person per group needs to fill the form.
- Project assignment will take **into account student preferences** and **project distribution** (in order to assign an equal number of students to each title). Selection and assignment will follow a First Come Fist Served (FCFS) policy – i.e., your preferences will be satisfied depending on the submission time.

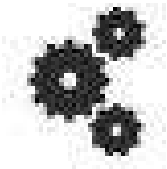
#4: AUDIO DEEPFAKE DETECTION

Given a database of synthetic/real audio, design a classifier that is able to distinguish fake audio from real one.

Dataset: https://www.asvspoof.org/index2019.html

Example software: https://github.com/sksmta/audio-deepfake-detection
https://github.com/Jerald-Golden/Audio-Deepfake-Detection

Project can be developed in Python, MATLAB.



MORE DETAILS

Classifier can be done using CNN, RNN or simple SVM, random forest, etc… on Spectrograms or FFT frames.

Can use other sources: mention them!!!

Some original work need to be done!