



INTRODUCTION TO IMAGE PROCESSING AND COMPUTER VISION

LAB 2 AND 3

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REALIZATION

- algorithms elaborated with OpenCV library
 - OpenCV (C++)
 - SimleCV/OpenCV (Python)
 - EmugCV (C#)
- source code with description (GUI is not obligatory)
- documentation (description of solution, testing procedure, results and comments)

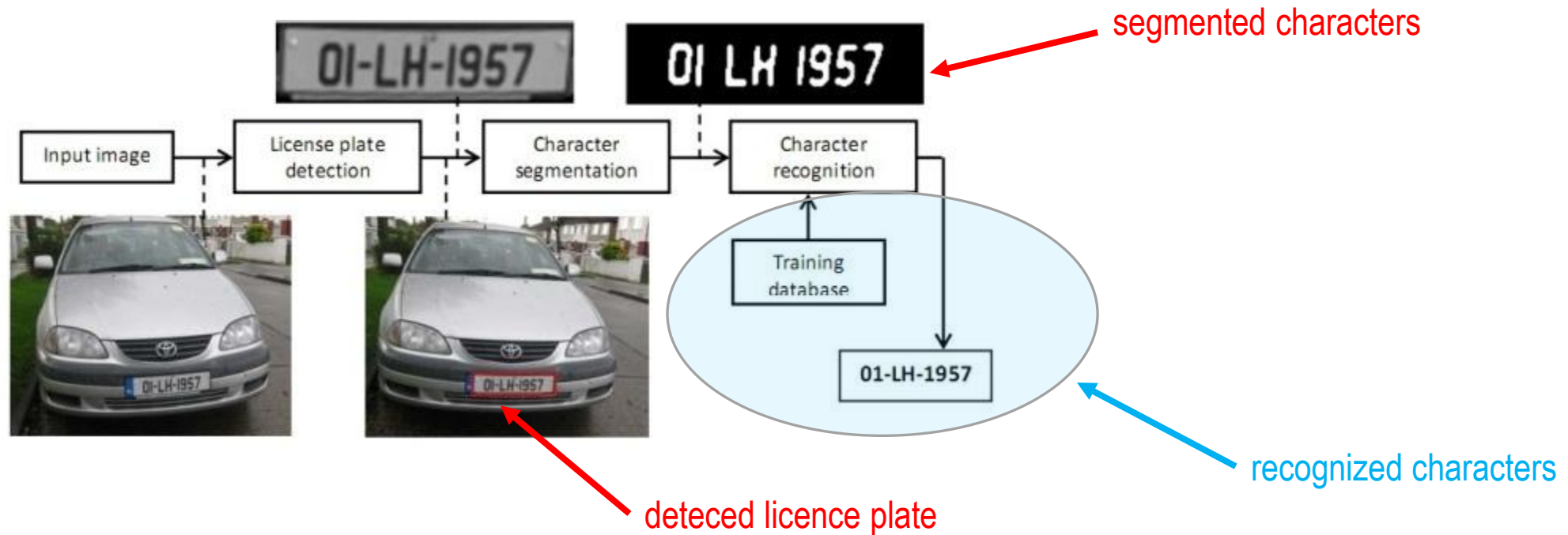
LEAVES SEGMENTATION AND LABELING

- input: images of leaves (three types, different background)
- output: segmented leaves with labels (categorizing each leaf)
- some form of unsupervised learning should be used (e.g. some form of clustering)



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- input: images of cars
- output: segmented car plates with extracted individual characters (two stages)
- recognition of characters is optional



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- different sets of input data (normal, some small shadows, close view) but also difficult cases (dirt and shadows)
- algorithm should be optimized for different cases
- verification should be performed first for normal and difficult cases separately than as a one test (overall efficiency for all data)



normal



difficult



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- solution as a source code (code, script, etc)
- some for of application (with simple GUI) is also possible but not obligatory

