Programming Project 03

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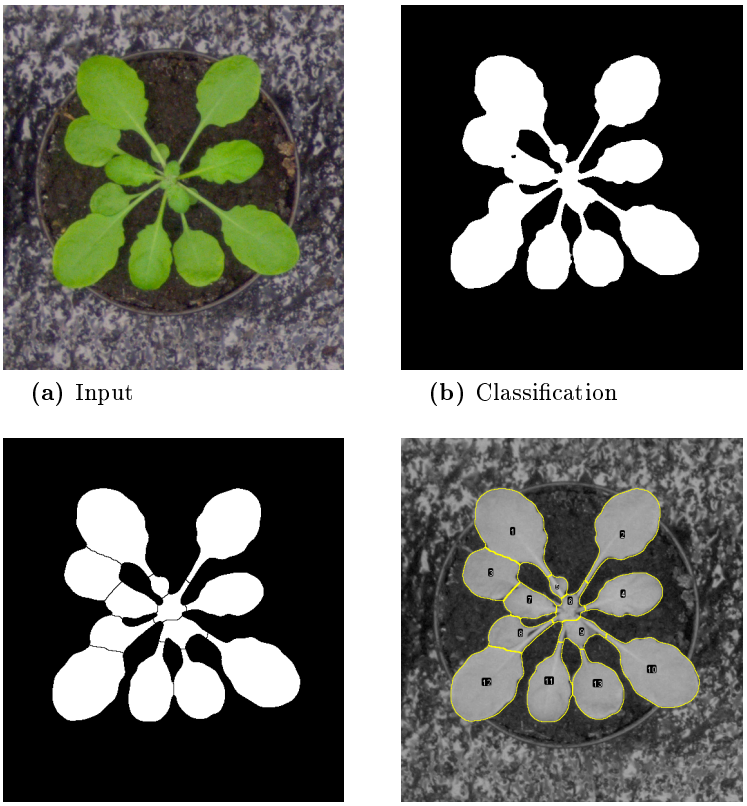

(a) Input **(b)** Classification

(c) Watershed **(d)** Particle Analysis

Figure 1 – The analysis of plant leaves is conducted by three steps. The RGB input image (a) is classified into plant and background by a trainable Weka segmentation classifier (b). Single leaf objects are identified by watershed segmentation (c). The binary mask is used to analyze properties in the splitted red, green and blue channel (d).

1 Introduction

This is a dummy sentence that shows how citations work (Adams et al., 2018).

2 Methodology

Short overview of the pipeline.

2.1 Segmentation

Trainable Weka stuff

2.2 Object Recognition

Watershed

2.3 Object Analysis

Particle Analyzer and additional stuff until csv export

2.4 Explorative Data Analysis

Everything in Python

3 Results

4 Discussion & Outlook

5 References

Adams, T., Dörpinghaus, J., Jacobs, M., and Steinhage, V. (2018). Automated lung tumor detection and diagnosis in CT Scans using texture feature analysis and SVM. In *Communication Papers of the 2018 Federated Conference on Computer Science and Information Systems*, Annals of Computer Science and Information Systems, pages 13–20. PTI.