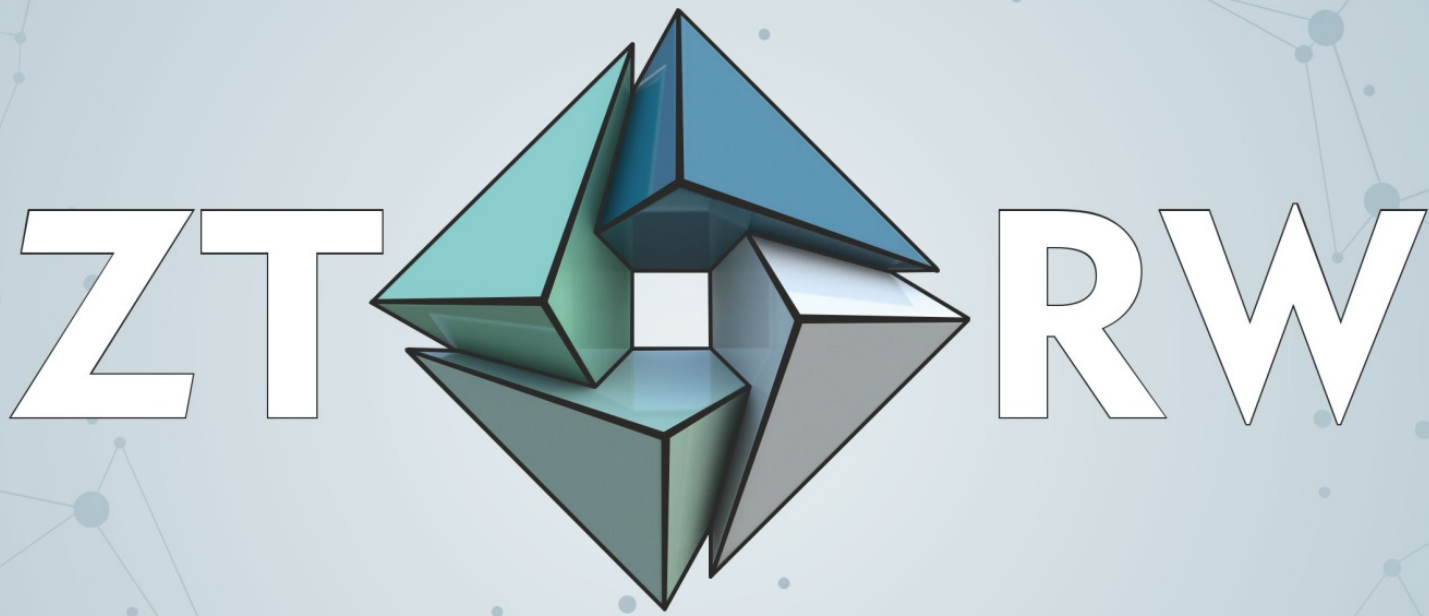
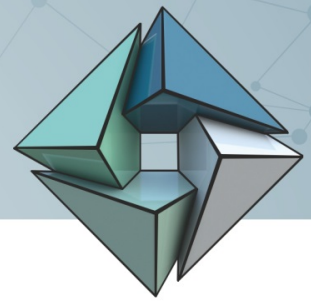

ZT
RW



Digital image processing #6

Object finding (segmentation?)

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Object finding (segmentation?)

Canny edge detector

- Task #45
  - Load color image
  - Perform Canny edge detection on image

Object finding (segmentation?)

Canny edge detector

```
// Ready for CODE!
```

Object finding (segmentation?)

Contour finding

- Task #46
  - Load image
  - Use cv::findContours for image
  - What is hierarchy for? Use different hierarchy types and compare results

Object finding (segmentation?)

Contour finding

```
//Ready for CODE!
```

Object finding (segmentation?)

cv::SimpleBlobDetector

- Task #47
  - Load and threshold an image
  - Create parameters object for simple blob detector
  - Create pointer to cv::SimpleBlobDetector
  - Detect objects on thresholded image

Object finding (segmentation?)

cv::SimpleBlobDetector

```
//Ready for CODE!
```

Object finding (segmentation?)

Hough transformation

- Task #48
  - Load and threshold image
  - Detect edges with any algorithm
  - Perform simple and probabilistic Hough transformation on image
  - Change parameters and discuss their influence on result
- Task #49
  - Load color image
  - Detect edges with any algorithm
  - Perform Hough circles transformation
- Task #50 (BONUS)
  - Load color image
  - Define own voting algorithm and perform operation

Basic neighborhood operations

How to invert transformation?

```
//Ready to code
```

Object finding (segmentation?)

Homework

- Task #44
  - Load carcassone image
  - With usage of custom algoruthm try to find and label as many objects as possible

Basic neighborhood operations

Get affine transformation

```
//Ready to code
```

The end

http://ztrw.mchtr.pw.edu.pl