

Automatic identification of landmarks by shape recognize

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Introduction

Introduction about presentation

Introduction

The flow diagram about the steps

Segmentation

Purpose:

- Extract the features (edge) from images
- Get the approximate lines

Method:

- Indicate the threshold value by analysis histogram of image
- Canny
- Break edge algorithm

Result: The set of approximate lines

Pairwise geometric histogram

Purpose: detecting the present of scene image in model image

- Method:**
- Construct the local PGH
 - Construct the shape PGH
 - Matching shape's PGH by Bhattacharyya metric

Pairwise geometric histogram

Local PGH and shape PGH

PGH: a matrix two dimensions: angle axis and distance axis

PGH information: angle between two lines and perpendicular distance from two endpoints of scene line to reference line.

Local PGH : PGH for each feature (line)

Shape PGH : contains many **Local PGH**

Probabilistic Hough Transform

- Purpose:
- Determine the presence and location of model image in scene image
 - Estimate the landmarks in the scene image
- Method:
- Construct the reference table
 - Find the pair scene lines have the best “vote”
 - Estimate the “reference point” in scene image
 - Estimate the landmarks

Template matching

This slide talk about the PHT method

Result

This slide talk about the result

Conclusion

This slide talk about conclusion

References

References slide