IMAGE PROCESSING USING MATLAB

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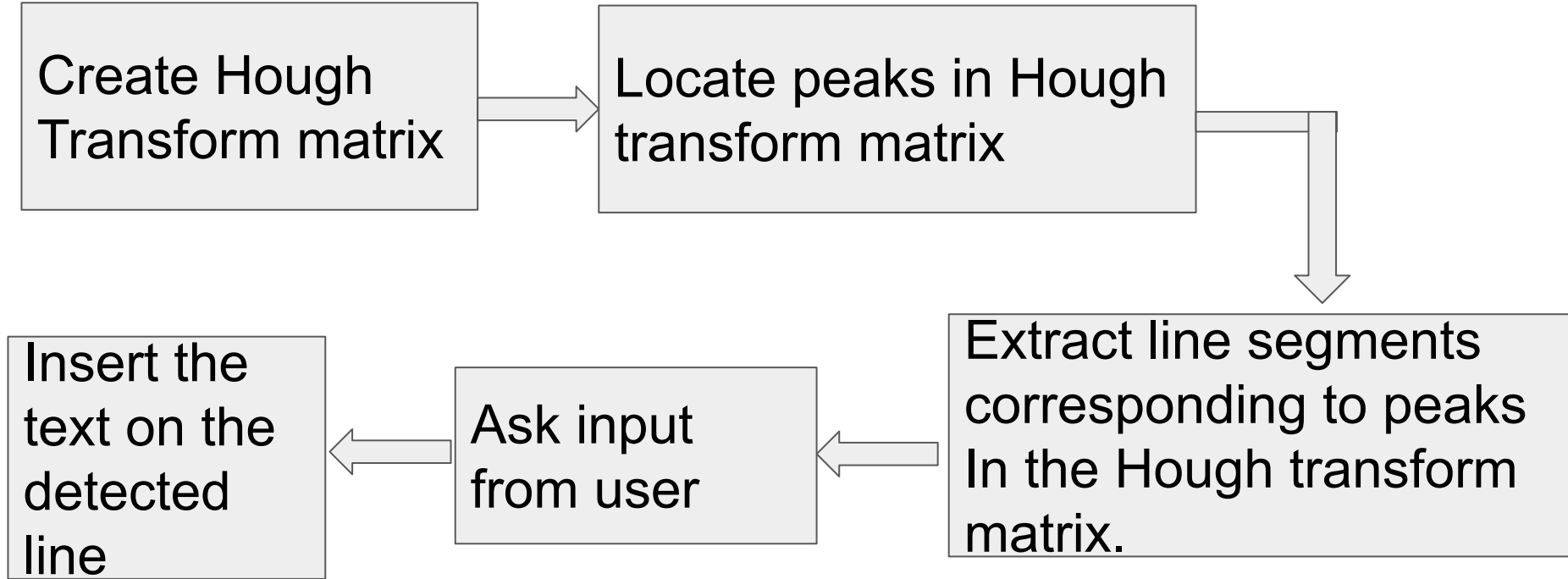
INTRODUCTION

TITLE:**Text Insertion Using Line Detection**

- Using Hough transform to detect a line.
- Ask the user for input.
- Insert the text back on the detected line.

MOTIVATION

We want to create a project that could actually benefit us as students .We come across forms in our daily life which are sent which we have to print out ,write on,scan and upload.From MATLAB class we learnt image detection and so applied it in this project to detect lines/blanks in a form and edit it.

METHODOLOGY

Create Hough Transform matrix → Locate peaks in Hough transform matrix →

Extract line segments corresponding to peaks In the Hough transform matrix. → Ask input from user → Insert the text on the detected line

Methodology Continuation

The lines detected are ordered to accept data from the user as would be read i.e from top to bottom.

This sorting is done by converting the structure returned by the houghlines function to a matrix.This matrix is further converted to array.This then allows us to sort the detected lines according to their y coordinates.

RESULT

Student Declaration / Undertaking

Name of the student: _____

BRN: _____

Program of Study: _____

Semester: _____

E-mail: _____

Contact No.: _____

Name and address of the parent & phone number:

_____

_____

I have gone through the Student Monitoring Guidelines provided by the University and agree to abide by the same. I have gone through the regulations of the University and shall not indulge in any act of indiscipline inside or outside the campus. I agree to take appropriate corrective actions for my academic improvement. I agree to keep my personal problems away from my academics and shall sort out the issues with my parents / counselor. I shall keep my parents informed at all times about any personal issues.

_____

Signature of the student

Parent / Guardian Declaration / Undertaking

I have gone through the Student Monitoring Guidelines provided by the University and extend my full support to the points mentioned therein. The information provided by my ward is correct and I take the responsibility to intimate any changes to the office from time to time. I understand that the student's personal and non-academic problems, which affect the student, are beyond the control of the University. I / we shall put my / our best effort to resolve them and will not hold the University responsible for such problems.

Place: _____

Date: _____

Signature of the Guardian: _____

Student Declaration / Undertaking

Name of the student: Devika Saran _____

BRN: PES1201800207 _____

Program of Study: BTech _____

Semester: 4 _____

E-mail: devikasaran@gmail.com _____

Contact No.: 9898213200 _____

Name and address of the parent & phone number:

22,Aditi Chowk,Simla-555636 _____

Rajanth Saran 9997878541 _____

I have gone through the Student Monitoring Guidelines provided by the University and agree to abide by the same. I have gone through the regulations of the University and shall not indulge in any act of indiscipline inside or outside the campus. I agree to take appropriate corrective actions for my academic improvement. I agree to keep my personal problems away from my academics and shall sort out the issues with my parents / counselor. I shall keep my parents informed at all times about any personal issues.

studentsignature _____

Signature of the student

Parent / Guardian Declaration / Undertaking

I have gone through the Student Monitoring Guidelines provided by the University and extend my full support to the points mentioned therein. The information provided by my ward is correct and I take the responsibility to intimate any changes to the office from time to time. I understand that the student's personal and non-academic problems, which affect the student, are beyond the control of the University. I / we shall put my / our best effort to resolve them and will not hold the University responsible for such problems.

Place: Bangalore _____

Date: 02/04/20 _____

Signature of the Guardian: guardiansignature _____

Result Continuation

The code repeatedly asks the user for input for how many ever lines are detected,and this input is inserted into the image above the corresponding detected line.

In the end once all the input has been entered,the image shall be saved to file.

APPLICATIONS

- This is importantly used in the forms which need to be edited with details and then have to be uploaded.Our project will save the user from having to downloading,printing,entering details,scanning and then uploading the form.The project will allow the user to fill in details and will save the image.
- This can also come handy in solving any kind of worksheets, solving and saving it for any further use.

REFERENCE

- in.mathworks.com