**Task 2.3D Answer sheet**

Fill in the “**Results**” column with relevant results

**Notes**:

* Examples are given for illustration purposes only and need to be replaced by your own results.
* Missing any required results will result in a re-submission.

**1. Results of candidate point selection on doc.jpg**

|  |  |  |
| --- | --- | --- |
|  | **Candidate points** | **Computational speed (in calculating candidate points)** |
| **Strategy a** | Example | Example  1.1 seconds |
| **Strategy b** | Example | Example  1.2 seconds |
| **Strategy c** | Example | Example  1.3 seconds |

**2. Performance analysis**

**Note:** For each setting (i.e., a combination of a point selection strategy and density threshold), you need to fill in the respective cell of the setting with the following information.

* Deskewing result of the setting (i.e., a deskewed image of doc.jpg).
* Computational speed of applying the Hough transform and the entire skew estimation process (from input to output).

|  |  |  |  |
| --- | --- | --- | --- |
|  | **density threshold 1** | **density threshold 2** | **density threshold 3** |
| **Strategy a** | Deskewing result (image) + computational speed (Hough transform, entire process) |  |  |
| **Strategy b** |  |  |  |
| **Strategy c** |  |  |  |

**3. Other test cases**

Based on the results in Section 2, choose ONE point selection strategy and ONE density threshold that you find best.

**What is your chosen point selection strategy?**

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| --- |
|  |

**What is your chosen density threshold?**

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|  |

**Results of other test cases**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Input image** | **Output image (deskewed)** | **Computational speed (candidate point selection, Hough transform, entire process)** |
| **Test case 1** |  |  |  |
| **Test case 2** |  |  |  |
| **Test case 3** |  |  |  |
| **Test case 4** |  |  |  |
| **Test case 5** |  |  |  |
| **Add more test cases if you wish** |  |  |  |

**Observe and discuss the results. Does the Hough transform accurately work in every case? If not, what could be the reason and how to address it?**

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**4. Text recognition using pytesseract**

Provide screenshots with recognised text highlighted to showcase the effectiveness of skew correction to text recognition.

|  |  |  |
| --- | --- | --- |
|  | **Text recognition without skew correction (screenshot)** | **Text recognition with skew correction (screenshot)** |
| **doc.jpg** |  |  |
| **Test case 1** |  |  |
| **Test case 2** |  |  |
| **Test case 3** |  |  |
| **Test case 4** |  |  |
| **Test case 5** |  |  |
| **Add more test cases if you wish** |  |  |