Text Handwriting Conversion using Neural Networks

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Contents

1. Introduction

- It is often difficult to read students handwriting and understand what's written.

- The speed can be improved by converting text into handwritten instead of writing.

- Some forms require the user to fill the form handwritten and are not available online.

2.Problem Definition:

- To convert text to handwriting.

- Creating lightweight model so it can be implemented in applications.
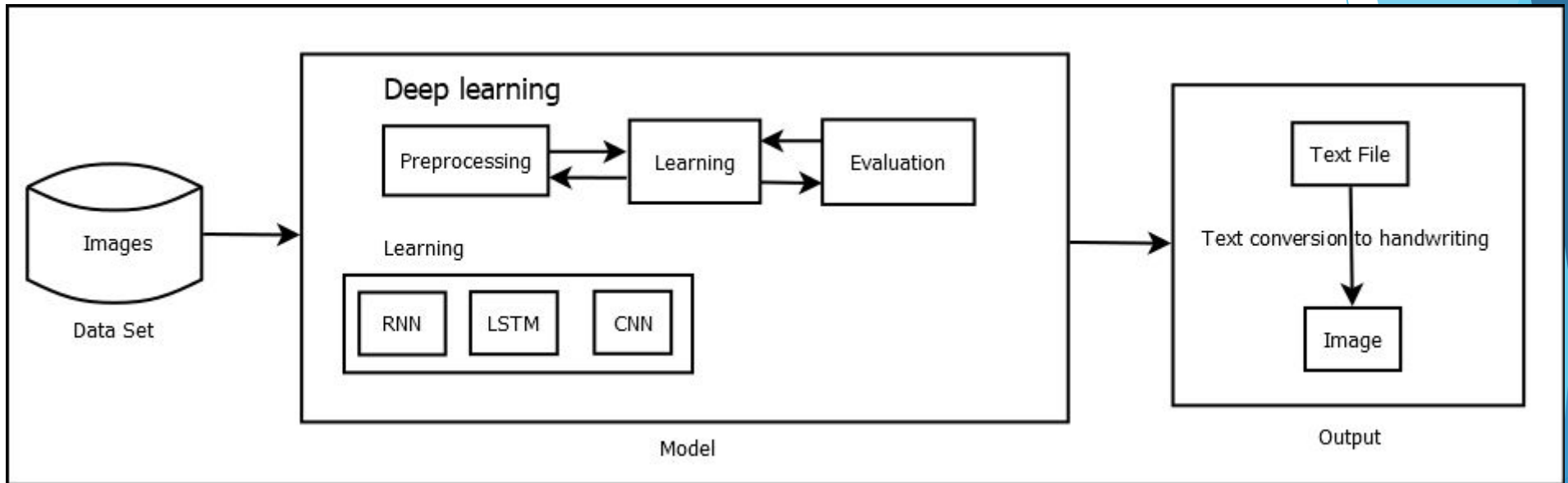
- To convert handwriting to text.

3. Objectives

- To recognize and convert the handwritten characters and numbers into digitized text characters.

- To convert text to handwritten characters using LSTM.

- To export the text file to a page.

4. Technology Stack

1. Python3, Anaconda, Jupiter Notebook

2. Numpy, SciKit, Pandas, TensorFlow

3. FeatureTool

5.Proposed System Architecture/ Working

System Workflow

6. Prototype Design Demonstration

Image   Text

Kunal Sant

```
Recognized: "Kunal  Sant"
Probability: 0.17584793269634247
```

Neha is a teacher

```
Recognized: "Neha is a teaches"
Probability: 0.05906381085515022
```

Kunal is ce Student

```
Recognized: "Kunel is ce Student "
Probability: 0.025477349758148193
```

Text to Handwriting

Neha is a teacher

. Neha is a teacher

Neha is a teacher

Neha is a teacher

Neha is a teacher

Neha is a teacher

Neha is a teacher

Neha is a teacher

Neha is a teacher

Kunal Sani

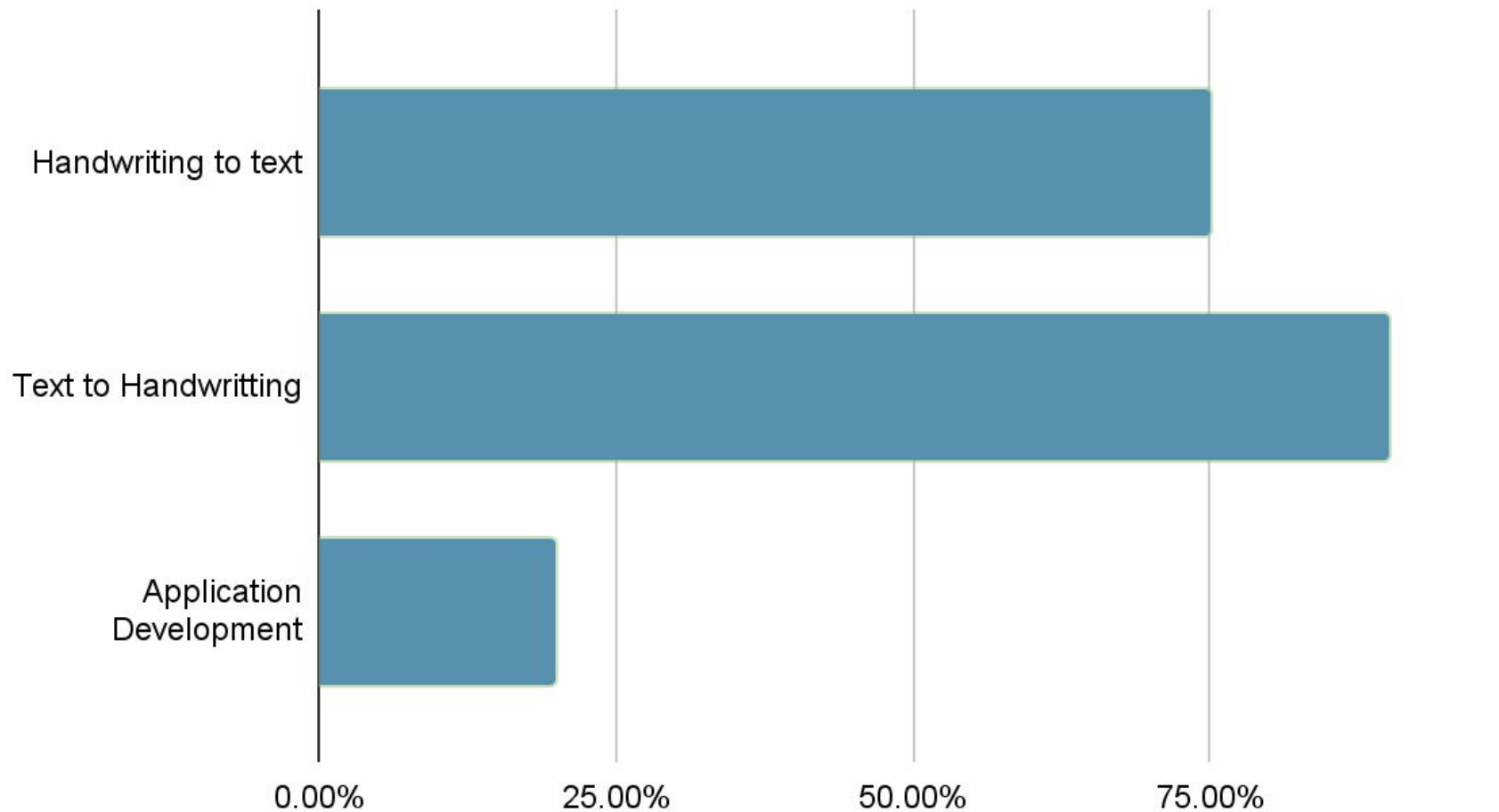Kunal Sant

Kunal Sant

Kunal Sant
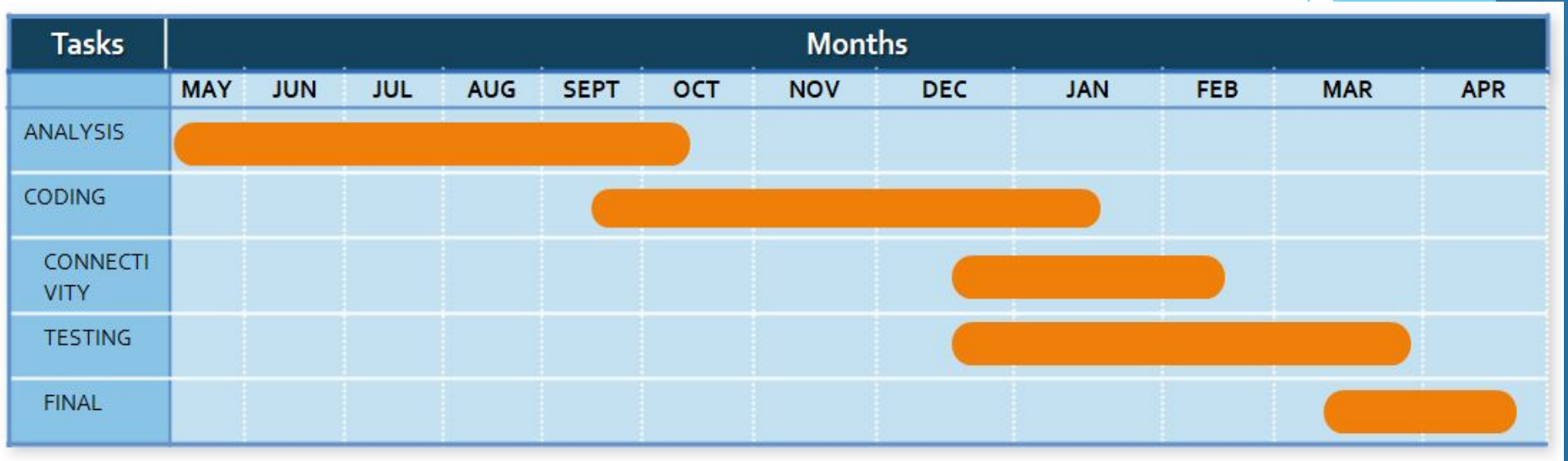
Kunal Sani

Kunal Sani

Kunal Sant

Kunal Sant

Kunal Sani

7.Implementation Status

Project Progress bar chart showing:
- Handwriting to text: ~75.00%
- Text to Handwritting: ~88%
- Application Development: ~18%

Gantt Chart

Tasks	Months											
	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR
ANALYSIS	██	██	██	██	██							
CODING				██	██	██	██	██	██			
CONNECTIVITY								██	██	██		
TESTING								██	██	██	██	
FINAL											██	██

8.Status of Paper Draft & Targeted Conference

1. [International Conference on Computational Intelligence and Innovative Technologies (ICCIIT – 2022)](#)
2. [THIRD INTERNATIONAL CONFERENCE ON INTELLIGENT COMPUTING, INSTRUMENTATION](#) [AND CONTROL TECHNOLOGIES-2022](#)

Thank You...!!