** Selected2 cover sheet **

**Faculty of computer and artificial intelligence.**

**CS396\_Selected CS2 (2021-2022).**

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|  |  |
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Image Classification Based on the Boost

Convolutional Neural Network

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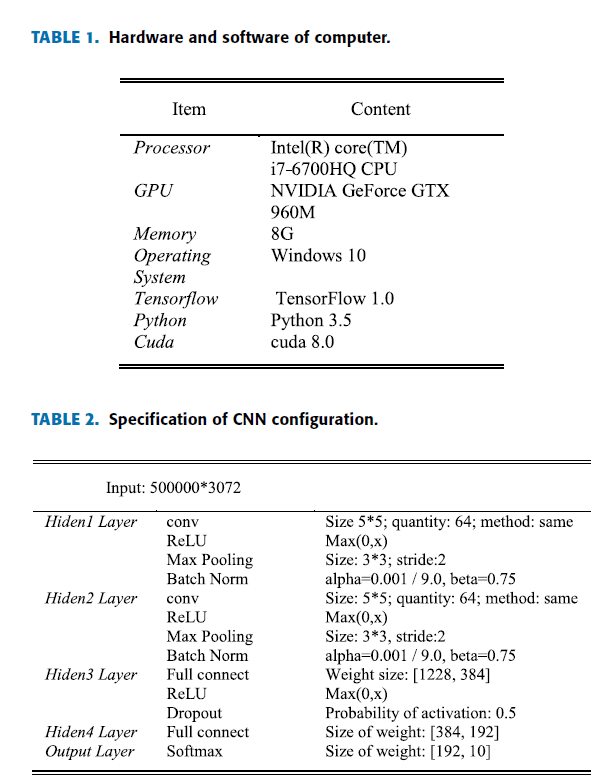
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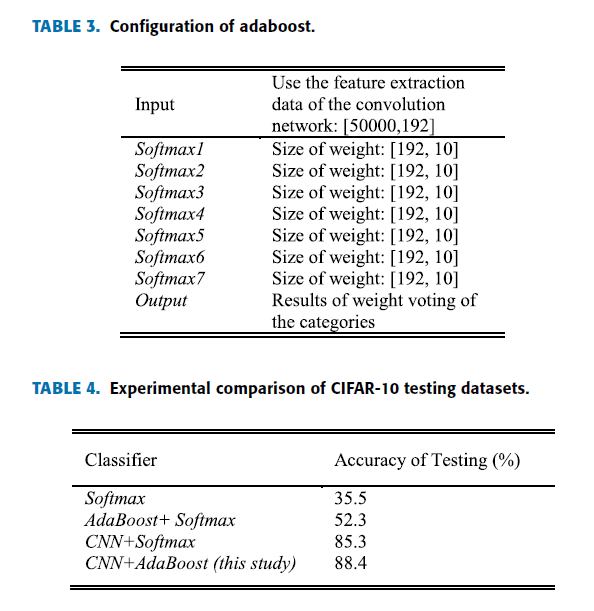
This work was supported in part by the Key Laboratory of Software Engineering of Yunnan Province under Grant 2017SE202, in part by

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**Project Description Document:**

**General Information on the selected dataset:**

**Rock-Paper-Scissors**

<https://drive.google.com/drive/folders/1ERpc8o3Z1o8srtvMkmrQKGf-5_1ZdiJH?usp=sharing>

Total number of samples: 2892 sample.

the dimension of images: (227, 227, 1).

number of classes: (3).

their labels:

1-paper

2-scissors

3-rock

**CIFAR-10**

<https://www.cs.toronto.edu/~kriz/cifar.html>

Total number of samples: 60000 sample.

the dimension of images: (32, 32, 3).

number of classes: (10).

their labels:

(1-airplane, 2-automobile ,3-bird, 4-cat ,5-deer ,6-dog, 7-frog ,8-horse, 9-ship, 10-truck)

**Implementation details:**

**CIFAR-10**

Training (83.3%=50000 image), validation (16.67%=10000) and testing (16.67%=10000).

**Rock-Paper-Scissors**

Training (87.13%=2520 image), validation (0) and testing (12.86%=372).

CNN on cifar-10

A picture containing text

Description automatically generated

**A picture containing chart

Description automatically generated**

CNN on Rock-Paper-Scissors

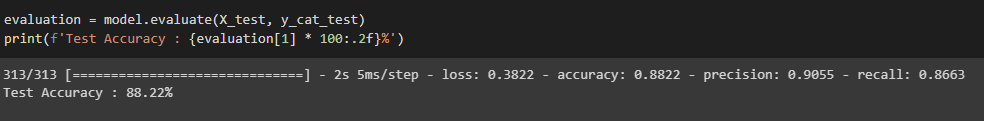
Chart, line chart

Description automatically generated A picture containing graphical user interface

Description automatically generated

**Results details:**

CNN on cifar-10

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CNN on Rock-Paper-Scissors

**Text

Description automatically generated**