**Task 5.1C Answer sheet**

Fill in the required results (numerical data, images).

**Notes**:

* Examples (if any) need to be replaced by your results.
* Missing any required results will result in a re-submission.

**1. Image recognition in CIFAR10**

|  |  |
| --- | --- |
|  | **Recognition accuracy of the CNN in Section 3.1 in the test set of CIFAR10** |
| Plane | Accuracy of plane : 63 % |
| Car | Accuracy of car : 78 % |
| Bird | Accuracy of bird : 58 % |
| Cat | Accuracy of cat : 38 % |
| Deer | Accuracy of deer : 51 % |
| Dog | Accuracy of dog : 54 % |
| Frog | Accuracy of frog : 78 % |
| Horse | Accuracy of horse : 68 % |
| Ship | Accuracy of ship : 81 % |
| Truck | Accuracy of truck : 73 % |
| Overall | Accuracy of the network on the 10000 test images: 64 % |

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| --- |
| **Confusion matrix of the CNN in Section 3.1 in the test set of CIFAR10** |
|  |

**2. Image recognition in FoodImages with training-from-scratch setting**

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| --- | --- |
|  | **Recognition accuracy of the CNN in Section 3.1 in the test set of FoodImages** |
| Cakes |  |
| Pasta |  |
| Pizza |  |
| Overall |  |

|  |
| --- |
| **Confusion matrix of the CNN in Section 3.1 in the test set of FoodImages** |
|  |

**3. Image recognition in FoodImages with fine-tuning**

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| --- | --- |
|  | **Recognition accuracy of the CNN in Section 3.1 in the test set of FoodImages** |
| Cakes |  |
| Pasta |  |
| Pizza |  |
| Overall |  |

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| **Confusion matrix of the CNN in Section 3.1 in the test set of FoodImages** |
|  |

**4. Image recognition in FoodImages with customised training**

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| --- | --- |
|  | **Recognition accuracy of the CNN in Section 3.1 in the test set of FoodImages** |
| Cakes |  |
| Pasta |  |
| Pizza |  |
| Overall |  |

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| --- |
| **Confusion matrix of the CNN in Section 3.1 in the test set of FoodImages** |
|  |

**5. Object detection in Aquarium**

**a. Detection performance**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **mAP@50** | **mAP@50-95** | **Training time (in minutes)** | **Testing time (in minutes)** | **Inference speed (frames-per-second)** |
| **FasterRCNN\_ResNet50\_FPN\_Weights** |  |  |  |  |  |
| **FasterRCNN\_MobileNet\_V3\_Large\_320\_FPN\_Weights** |  |  |  |  |  |

**b. Visual results of FasterRCNN with MobileNet\_V3\_Large\_320\_FPN backbone**

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| --- | --- |
| **Test case 1** | Example |
| **Test case 2** |  |
| **Test case 3** |  |
| **Test case 4** |  |
| **Test case 5** |  |