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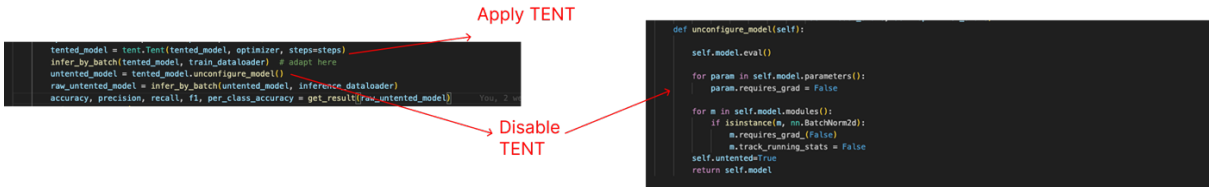
APPENDIX

1. Post-processing 'applyHeuristic' code gained from decompilation using javadecompilers.n

```
/* JADX DEBUG: Multi-variable search result rejected for TypeSearchVarInfo{r2v8, resolved type: java.lang.Number} */
/* JADX WARNING: Multi-variable type inference failed */
/* Code decompiled incorrectly, please refer to instructions dump. */
private final int applyHeuristic(float[] r11) {
    /*
        r10 = this;
        kotlin.ranges.IntRange r0 = kotlin.collections.ArraysKt.getIndices((float[]) r11)
        java.lang.Iterable r0 = (java.lang.Iterable) r0
        java.util.Iterator r0 = r0.iterator()
        boolean r1 = r0.hasNext()
        if (r1 != 0) goto L_0x0012
        r0 = 0
        goto L_0x0043
    L_0x0012:
        java.lang.Object r1 = r0.next()
        boolean r2 = r0.hasNext()
        if (r2 != 0) goto L_0x001e
    L_0x001c:
        r0 = r1
        goto L_0x0043
    L_0x001e:
        r2 = r1
        java.lang.Number r2 = (java.lang.Number) r2
        int r2 = r2.intValue()
        r2 = r11[r2]
    L_0x0027:
        java.lang.Object r3 = r0.next()
        r4 = r3
        java.lang.Number r4 = (java.lang.Number) r4
        int r4 = r4.intValue()
        r4 = r11[r4]
        int r5 = java.lang.Float.compare(r2, r4)
        if (r5 >= 0) goto L_0x003c
        r1 = r3
        r2 = r4
    L_0x003c:
        boolean r3 = r0.hasNext()
        if (r3 != 0) goto L_0x0027
        goto L_0x001c
    L_0x0043:
        java.lang.Integer r0 = (java.lang.Integer) r0
        r1 = 0
        if (r0 == 0) goto L_0x004d
        int r0 = r0.intValue()
        goto L_0x004e
    L_0x004d:
        r0 = r1
    L_0x004e:
```

2. Code For TENT Evaluation in Adaptation Size Evaluation



3. Code For SHOT Evaluation in Adaptation Size Evaluation

```
if iter_num % interval_iter == 0 or iter_num == max_iter:
    netF.eval()
    netB.eval()
    acc, _ ,precision, recall, f1, class_accuracies= cal_acc_key_metrics(dset_loaders['test'], netF, netB, netC) # Real accuracy after running n times
    log_str = 'Task: {}, Iter:{}/{}; Accuracy = {:.2f}%'.format(args.dset, iter_num, max_iter, acc)
    saveResultTestAccuracy(acc, f1,precision,recall,args.iteration,args.dset_size,iter_num,max_iter,"test_accuracy_with_max_iter_iter_num_key_metrics_tracked","/workspace/Dwika/fyp/saved_results_with_key_metrics")
    columns = ['Class', 'Accuracy',"iter_num","max_iter"]

    for class_label, accuracy in class_accuracies.items():
        write_row_to_csv(f"/workspace/Dwika/fyp/saved_results_with_key_metrics/per_class_acc/{args.dset_size}_{args.iteration}.csv", columns, [class_label, accuracy,iter_num,max_iter])

    print(log_str+'\n')
    netF.train()
    netB.train()
```

4. **Translating Yohanes (2025) to English website (tested on Microsoft Edge Version 135.0.3179.73 (Official build) (arm64) Mac OS)**

Reverse Engineering Model Handwritten Digits Recognition Aplikasi Mobile SIREKAP

yohanes
23/02/2024
ai, android, reverse-

Di tulisan ini saya akan melakukan reverse engineering aplikasi SIREKAP 2024, mengekstrak model TensorFlow Lite untuk inference, lalu membuat aplikasi Android untuk mengetes model tersebut. Saya bandingkan juga dengan model sederhana yang jadi contoh tutorial tensorflow lite.

CARI KONTEN

ENHANCED BY Google

SEARCH

Blog ini bertenaga surya

PAGES

5. **Github Link: https://github.com/Dwikavindra/Final_Year (with details written in README.MD)**