CSCI3230 / ESTR3108 2023-24 First Term Assignment 4 I declare that the assignment here submitted is original except for sourcematerial explicitly acknowledged, and that the same or closely related materialhas not been previously submitted for another course. I also acknowledgethatIam aware of University policy and regulations on honesty in academic work,andof the disciplinary guidelines and procedures applicable to breaches ofsuchpolicy and regulations, as contained in the following websites. University Guideline on Academic Honesty: http://www.cuhk.edu.hk/policy/academichonesty/ Faculty of Engineering Guidelines to Academic Honesty: <http://www.erg.cuhk.edu.hk/erg-intra/upload/documents/ENGG_Discipline.pdf>

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1a.

Best testing accuracy: 0.5388

一張含有 文字, 行, 圖表, 繪圖 的圖片

自動產生的描述一張含有 文字, 螢幕擷取畫面, 繪圖, 行 的圖片

自動產生的描述一張含有 文字, 行, 圖表, 繪圖 的圖片

自動產生的描述

1b.

Best testing accuracy: 0.6908

一張含有 文字, 行, 圖表, 繪圖 的圖片

自動產生的描述

一張含有 文字, 圖表, 行, 繪圖 的圖片

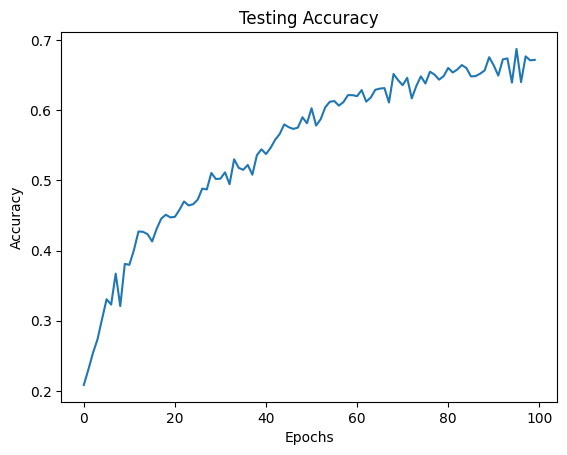
自動產生的描述一張含有 文字, 行, 繪圖, 螢幕擷取畫面 的圖片

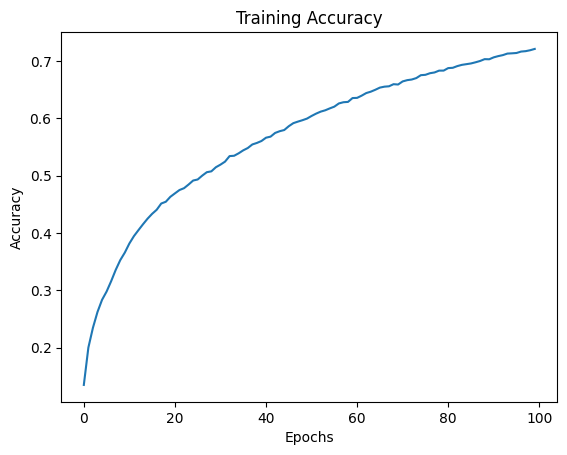
自動產生的描述

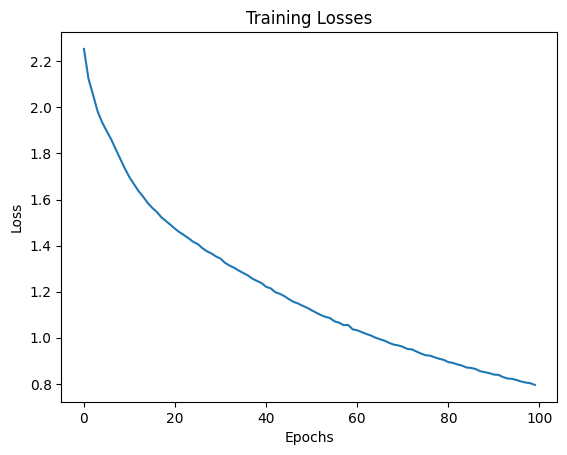
1c.

Best testing accuracy: 0.6874

Random Horizontal Flip and Random crop are used





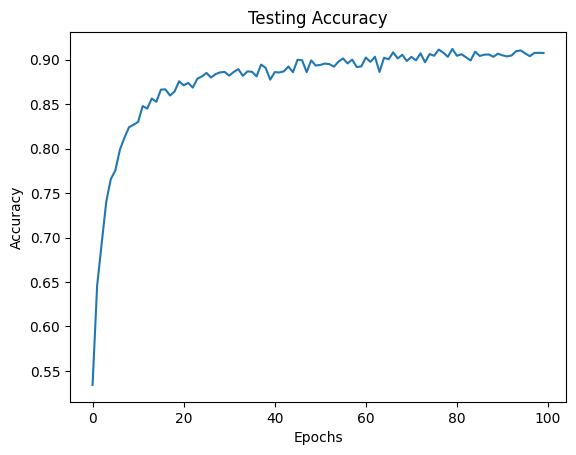
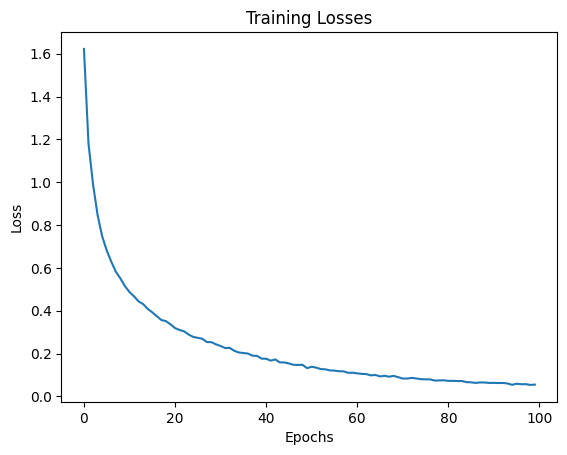
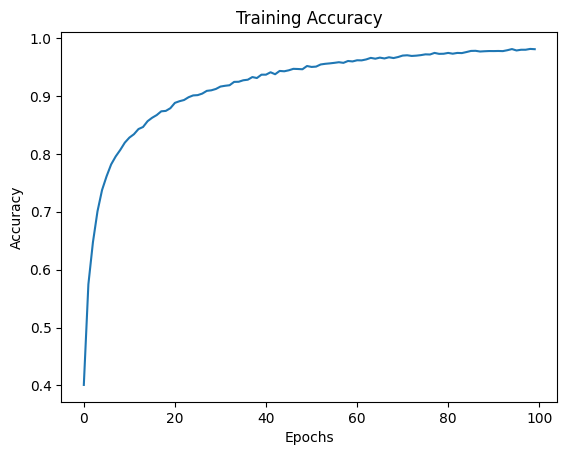


1d.

Best testing accuracy: 0.9122 (over 90%)

Changes:

1. Data augmentation: Random flip, rotation and affine is applied. Brightness, contrast and saturation are changed, and the input is normalized according to the mean and std of CIFAR-10.
2. Model: Resnet 18, an 18 layers deep Residual Network is used.



一張含有 文字, 螢幕擷取畫面, 字型, 行 的圖片

自動產生的描述一張含有 文字, 螢幕擷取畫面, 字型, 文件 的圖片

自動產生的描述一張含有 文字, 螢幕擷取畫面, 字型, 數字 的圖片

自動產生的描述