**FASHION\_MNIST**

* **MLP:** Starting performance yielded a test accuracy of 0.8899000287055969.

|  |  |
| --- | --- |
| **Parameter name** | **Value** |
| Layers (exluding output) | 2 |
| Units | 512 |
| Dropout | 0.2 each |
| Activation | SiLu, SiLu, Softmax |
| Optimiser | RMSPROP |
| Epochs | 20 |

* Increased dropout for regularisation
* Increased depth to 4 layers
* Added batch normalisation
* Changed optimiser to ADAM

This improved the accuracy to 0.9010000228881836

* **CNN:** Starting performance yielded a test accuracy of 0.72589999437332150.7

|  |  |
| --- | --- |
| **Parameter name** | **Value** |
| Layers (exluding output) | 4 |
| Units | 32,64,128 |
| Dropout | 0.25,0.5 |
| Activation | ReLu |
| Optimiser | Adedelta |
| Epochs | 20 |

* Adding more Conv2D layers (3 per block) and changing optimiser to Adam elevates accuracy all the way to 0.9373000264167786

**CIFAR-10**

* **MLP:** Proposed MLP architecture achieved a test accuracy of 0.5302000045776367
* **CNN:** Proposed CNN architecture achieved a test accuracy of 0.8593999743461609

This goes on to show that MLP is severely limited with regard to image classification. Therefore, our CNN implementation is able to generalise much better.