Split the validation data (*val* folder in the dataset) into validation and testing.

Configuration and their results: (The one highlighted in green looks good)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| dense\_units | dropout | weight\_decay | Lr | lr\_factor | epochs | train\_acc | val\_acc | test\_acc |
| 512 | 0.5 | 0.015 | 0.005 | 0.5 | 20 | 0.8987 | 0.8089 | 0.8108 |
| 512 | 0.5 | 0.02 | 0.005 | 0.5 | 20 | 0.8496 | 0.7930 | 0.7795 |
| 512 | 0.5 | 0.01 | 0.005 | 0.5 | 20 | 0.951 | 0.8150 | 0.8229 |
| 512 | 0.6 | 0.01 | 0.005 | 0.5 | 20 | 0.9499 | 0.8406 | 0.8333 |
| 512 | 0.5 | 0.02 | 0.005 | 0.3 | 20 | 0.8403 | 0.7865 | 0.7726 |
| 512 | 0.5 | 0.015 | 0.005 | 0.3 | 20 | 0.8576 | 0.8074 | 0.7899 |
| 512 | 0.5 | 0.015 | 0.005 | 0.5 | 20 | 0.8969 | 0.8247 | 0.8229 |
| 512 | 0.5 | 0.017 | 0.005 | 0.5 | 20 | 0.8683 | 0.8074 | 0.7934 |
| 1024 | 0.5 | 0.015 | 0.005 | 0.5 | 20 | 0.8999 | 0.8006 | 0.7951 |
| 1024 | 0.5 | 0.01 | 0.005 | 0.5 | 20 | 0.9547 | 0.8107 | 0.8229 |
| 1024 | 0.5 | 0.01 | 0.008 | 0.3 | 20 | 0.9171 | 0.8114 | 0.8151 |
| 1024 | 0.6 | 0.01 | 0.008 | 0.5 | 20 | 0.9407 | 0.8175 | 0.8290 |
| 1024 | 0.6 | 0.015 | 0.008 | 0.3 | 20 | 0.8634 | 0.8027 | 0.7917 |
| 1024 | 0.5 | 0.015 | 0.008 | 0.3 | 20 | 0.9162 | 0.7981 | 0.7656 |
| 1024 | 0.5 | 0.012 | 0.008 | 0.3 | 20 | 0.9204 | 0.7916 | 0.7934 |
| 1024 | 0.6 | 0.012 | 0.008 | 0.5 | 20 | 0.9319 | 0.8100 | 0.8142 |
| 1024 | 0.6 | 0.014 | 0.008 | 0.5 | 20 | 0.8795 | 0.7757 | 0.7708 |
| 512 | 0.6 | 0.01 | 0.008 | 0.5 | 20 | 0.9144 | 0.8251 | 0.8281 |
| 512 | 0.6 | 0.01 | 0.008 | 0.3 | 25 | 0.9270 | 0.8424 | 0.8212 |
| 256 | 0.6 | 0.01 | 0.008 | 0.3 | 25 | 0.9091 | 0.8323 | 0.8368 |
| 256 | 0.5 | 0.01 | 0.008 | 0.3 | 25 | 0.9293 | 0.8384 | 0.8238 |
| 256 | 0.5 | 0.01 | 0.008 | 0.5 | 25 | 0.9226 | 0.8121 | 0.8177 |
| 256 | 0.5 | 0.01 | 0.005 | 0.5 | 25 | 0.9232 | 0.8251 | 0.8108 |
| 256 | 0.5 | 0.02 | 0.005 | 0.5 | 25 | 0.8433 | 0.7822 | 0.7587 |
| 256 | 0.5 | 0.015 | 0.005 | 0.5 | 25 | 0.8861 | 0.8100 | 0.7899 |
| 256 | 0.5 | 0.015 | 0.005 | 0.5 | ~~35~~ 21 | 0.8831 | 0.8157 | - |
| 128 | 0.5 | 0.01 | 0.005 | 0.5 | 30 | 0.9466 | 0.8348 | 0.8351 |
| 128 | 0.5 | 0.015 | 0.005 | 0.5 | 30 | 0.8834 | 0.8211 | 0.8281 |
| 128 | 0.5 | 0.015 | 0.008 | 0.7 | 35 | - | - | - |
| 128 | 0.5 | 0.015 | 0.005 | 0.7 | 35 | 0.9069 | 0.8193 | 0.8351 |
| 128 | 0.5 | 0.02 | 0.008 | 0.7 | 35 | 0.8272 | 0.7717 | 0.7778 |
| 128 | 0.5 | 0.02 | 0.005 | 0.7 | 35 | 0.8487 | 0.8100 | 0.7891 |
| 128 | 0.5 | 0.017 | 0.005 | 0.5 | 35 | 0.8871 | 0.8150 | 0.8056 |
| 256 | 0.5 | 0.017 | 0.005 | 0.5 | 35 | 0.9019 | 0.8251 | 0.8472 |
| 64 | 0.5 | 0.01 | 0.008 | 0.5 | 35 | 0.9356 | 0.8334 | 0.8299 |
| 64 | 0.5 | 0.015 | 0.008 | 0.5 | 35 | 0.8589 | 0.8053 | 0.8299 |
| 64 | 0.5 | 0.015 | 0.005 | 0.5 | 35 | 0.8570 | 0.8128 | 0.8281 |
| 64 | 0.5 | 0.015 | 0.001 | 0.5 | 35 | 0.7842 | 0.7804 | 0.7613 |