With merged dataset.

Todo: dataset balance (check if imbalanced and apply balancing).

Todo: train on dataset and test on a different one.

Todo: create new testing dataset.

Todo: maybe model is familiar with dataset

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Architecture | Image size | Batch Size | Epochs | Train Accuracy | #params | Validation Accuracy % | Test Accuracy % | Precision | Recall | F1-Score |
| SqueezeNetV1\_1 | 112 | 64 | 80 | 99 | 723k | 95 | 95 | 1 | 98 | 99 |
| SqueezeNetV1\_1 | 48 | 64 | 80 | 99 | 723k | 94 | 95 | 1 | 96 | 98 |
| SqueezeNetV1\_1 | 40 | 64 | 80 | 96 | 723k | 93 | 89 | 1 | 89 | 94 |
| FLSCNN | 112 | 64 | 80 | 58 | 25k | 58 |  |  |  |  |

With NEWEST\_DATASET\_BUMPS for train and Old\_GP for test.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Architecture | Image size | Batch Size | Epochs | Train Accuracy | #params | Validation Accuracy % | Test Accuracy % | Precision | Recall | F1-Score |
| SqueezeNetV1\_1 | 112 | 64 | 40 | 98 | 723K | 95 | 89 | 1 | 86 | 92 |
| SqueezeNetV1\_1 | 48 | 64 | 40 | 98 | 723K | 94 | 83 | 1 | 97 | 98 |

With Old\_Gp for train and NEWEST\_DATASET\_BUMPS for test.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Architecture | Image size | Batch Size | Epochs | Train Accuracy | #params | Validation Accuracy % | Test Accuracy % | Precision | Recall | F1-Score |
| SqueezeNetV1\_1 | 112 | 64 | 40 | 91 | 723K | 94 | 60 | 1 | 49 | 65 |