Architecture used in the Paper

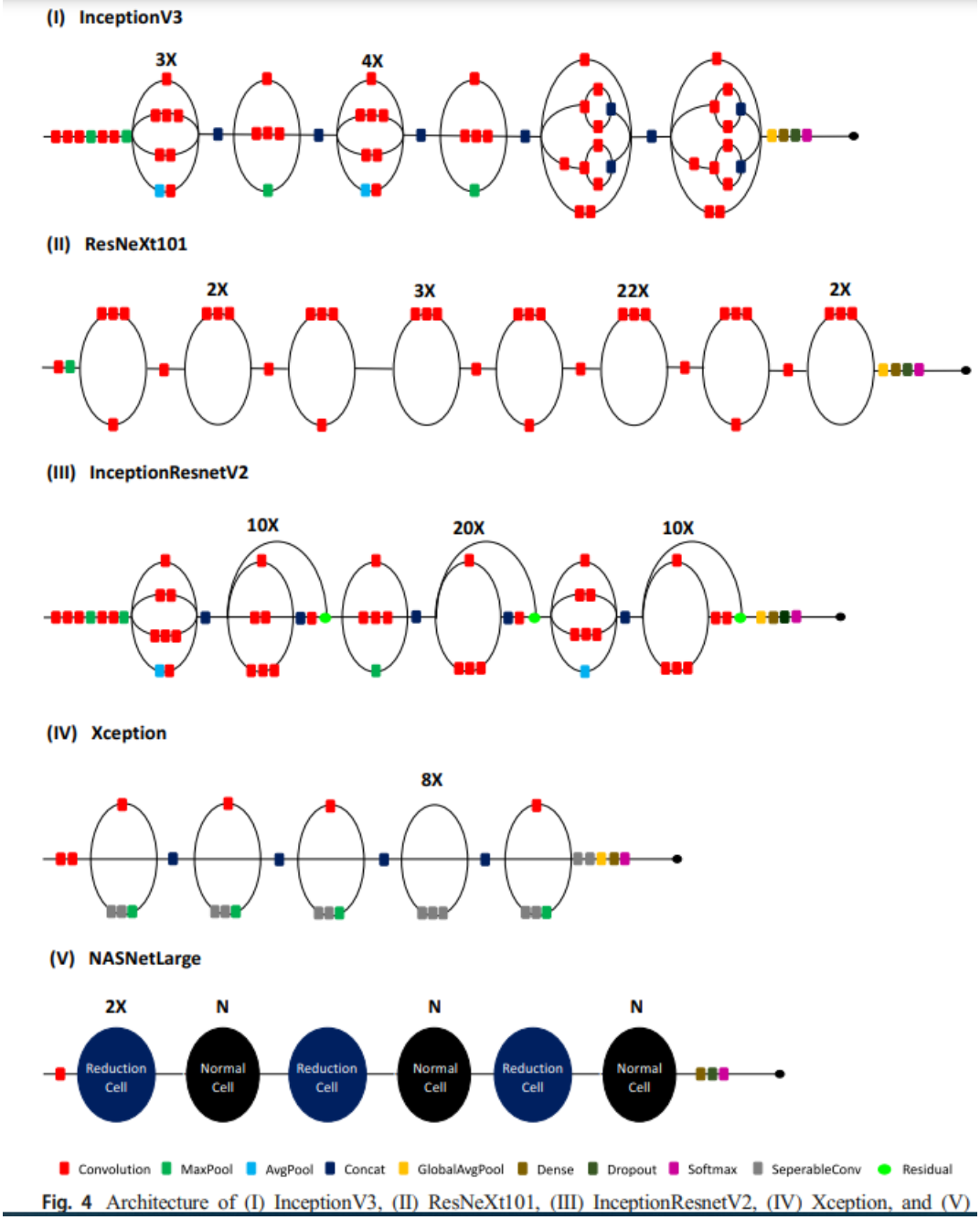


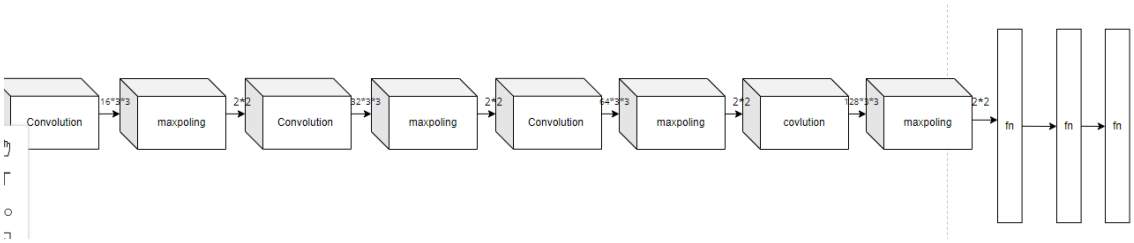
Fig. 4 Architecture of (I) InceptionV3, (II) ResNeXt101, (III) InceptionResnetV2, (IV) Xception, and (V)

Dataset details

The dataset contains 10,015 dermoscopy images of seven skin cancer types:
Melanocytic nevi (6705 images)
Melanoma (1113 images)
Benign keratosis (1099 images)
Basal cell carcinoma (514images)
Actinic keratosis (327 images)
Vascular Lesions (142 images)
Dermatofibroma (115 images).
The dataset of 10,015 images were split into the training set (6410 images) and validation set (1602 images) and testing set (2003 images).

Implementation details

- We split our dataset to 80% training and 20%testing and then split the training set for 80%training and 20% validation set. So The dataset of 10,015 images were split into the training set (6410 images) and validation set (1602 images) and testing set (2003 images).
- Block diagram for model.



- Hyperparameter used in our model is :- `learning_rate = 0.001,`
  `Optimizer:Adam, Activation functions:Relu & Softmax,`
  `number of epochs:25,batch size 64,` number of neurons =(64,32,7)

Result and Visualization

Measures used in evaluation is :

Accuracy& precision&recall&f1score

Test Accuracy: 97.924%

	precision	recall	f1-score	support
nv	0.99	0.88	0.93	1385
mel	0.93	0.99	0.96	1328
bkl	0.95	1.00	0.97	1294
bcc	0.99	1.00	1.00	1325
akiec	1.00	1.00	1.00	1270
vasc	1.00	1.00	1.00	1293
df	1.00	1.00	1.00	1257
accuracy			0.98	9152
macro avg	0.98	0.98	0.98	9152
weighted avg	0.98	0.98	0.98	9152