|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | Tool | Data set | Number of Images | Data Type | Data Processing Method | Evaluation Method | Validation Technique | Accuracy | R# |
| mAlexNet  mAlexNet+BiLSTM | Matlab | COVID-19 Radiography Database | 219 COVID-19 1345 Pneumonia  1341 Normal | Images | Image Segmentation | Confusion Matrix | Predictive Model | 98.14%  98.70% | [1] |
| CNN  CNN-LSTM | ? | GitHub,  Radiopaedia,  The Cancer Imaging Archive (TCIA),  Italian Society of Radiology (SIRM) | 1525 COVID-19 1525 Pneumonia  1525 Normal | Images | Shuffling, Resizing and Normalization | Confusion Matrix | 5-Fold Cross-Validation | 99.00%  99.40% | [2] |
| CNN | Matlab | Cohen et al.,  Kermany et al.,  Radiological Society of North America (RSNA), Radiopedia,  Italian Society of Medical and Interventional Radiology (SIRM),  Kaggle | 184 COVID-19  1494 Pneumonia  2771 Bacteria  1575 Normal | Images | No Data Processing | Confusion Matrix | Predictive Model | 65.90%  ? | [3] |
| Efficient  NetB4 | Google Colab | Kaggle  Cohen et al. | 504 COVID-19  504 Pneumonia  500 Normal | Images | Data Augmentation | Binary Classification | Stratified 10-Fold Cross-Validation | 99.62% | [4] |
| CNN | ? | Cohen et al. | 253 COVID-19  63 Pneumonia and Normal | Images | Data Augmentation | Confusion Matrix | Cross-Validation | 96.00% | [5] |
| MLP-CNN + Rmsprop | Python | Cohen et al. | 112 COVID-19  30 Normal | Images | No Data Processing | Confusion Matrix | 5-Fold Cross-Validation | 95.38% | [6] |
| CNN | ? | Guangzhou Maternal and Child Health Center,  Shenzhen Third People's Hospital | 297 COVID-19  150 Normal | Images | Image Segmentation | Confusion Matrix | Predictive Model | 92.78% | [7] |
| CNN | Matlab | Cohen et al,  Kaggle | 453 COVID-19  497 non-COVID | Images | Image Segmentation | Confusion Matrix | 10-Fold Cross-Validation | 91.16% | [8] |
| CNN-Softmax,  CNN-SVM,  CNN-RF | ? | Cohen et al. | 48 COVID-19  23 Normal | Images | Data Augmentation | Confusion Matrix | Predictive Model | 95.2%  90.5%  81.00% | [9] |
| CNN | Python | Cohen et al. | 224 COVID-19  504 Normal | Images | Data Augmentation | Binary Classification | 5-Fold Cross-Validation | 99.32% | [10] |
| CNN | ? | COVID-19 Chest X-Rays for Lung Severity Scoring,  Kaggle | 84 COVID-19  47 Normal | Images | No Data Processing | Confusion Matrix | 5-Fold Cross-Validation | ? | [11] |
| CNN | ? | Cohen et al. | 182 COVID-19  182 Normal | Images | No Data Processing | Confusion Matrix | Predictive Model | 96.3% | [12] |
| CNN | Python | Cohen et al.,  Kermany et al., | 1768 COVID-19  996 Normal | Images | Data Augmentation | Confusion Matrix | 5-Fold Cross-Validation | 92.74% | [13] |
| CNN | ? | ? | 1296 COVID-19  1735 Pneumonia  1325 Normal | Images | No Data Processing | Confusion Matrix | Predictive Model | ?  AUC: 96% | [14] |
| CNN | Matlab | Zhao et al.,  Italian dataset | 439 COVID-19  344 Normal | Images | Data Augmentation | Confusion Matrix | 10-Fold Cross-Validation | 85.03% | [15] |
| CNN | Google Cloud,  Pytorch | Cohen et al.,  Radiopaedia,  AG Chung,  ActualMed,  SIRM,  RSNA Challenge,  Paul Mooney | 558 COVID-19  10434 Normal  4273 Pneumonia | Images | Data Augmentation | Confusion Matrix | 5-Fold Cross-Validation | 99.80% | [16] |
| CNN | Matlab | Cohen et al.,  IEEE Trans Med Imaging | 105 COVID-19  80 Normal  11 SARS | Images | Data Augmentation | Confusion Matrix | Predictive Model | 93.1% | [17] |

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