**Deep learning model for binary classification of COVID-19 based on Chest X-Ray**

[Reham S. Saeed](https://ieeexplore-ieee-org.proxy.bib.uottawa.ca/author/37087111365) and [Bushra K. Oleiwi](https://ieeexplore-ieee-org.proxy.bib.uottawa.ca/author/37088764380) aimed to develop a deep learning model for the binary classification of COVID-19 based on Chest X-Ray images. The dataset used was obtained from public sources on Kaggle and consisted of positive COVID-19 cases and normal cases. The researchers utilized a Convolutional Neural Network (CNN) model for the classification task. The results showed promising performance, with an accuracy of 96.68%, recall of 94.12%,F1 Score of 93.8%, specificity of 97.61%, and precision of 93%. The performance of the model was evaluated using these metrics.

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| --- | --- | --- | --- | --- | --- |
| Phase | Recall | Specificity | Accuracy | Precision | F1 Score |
|  | 94.12% | 97.61% | 96.68% | 93.49% | 93.80% |

These results demonstrate the effectiveness of the proposed model in accurately classifying COVID-19 cases based on CXR images.

<https://ieeexplore-ieee-org.proxy.bib.uottawa.ca/document/10099555/authors#authors>