







TABLE II. RESULTS OF THE PROPOSED WAVELET-BASED ALGORITHM

Experiment	Accuracy (%)	Precision (%)	Recall (%)
Exp. 1	95%	84%	86%
Exp. 2	93%	96%	92%
Exp. 3	98%	99%	81%
Exp. 4	96%	100%	87%
Exp. 5	94%	87%	93%
Total	95.2%	93.2%	87.8%

Figures 7, 8 and 9 graphically present the obtained results for experiments 1, 2 and 3 for wavelet feature-based algorithm using neural network.

Submitted classification image



Classified Image

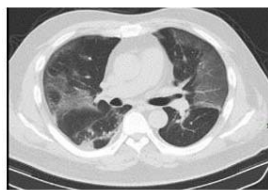
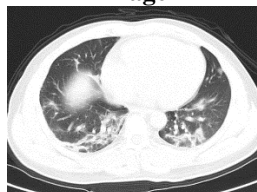


Fig. 7. Covid image classification result for experiment 1

Submitted classification image



Classified Image

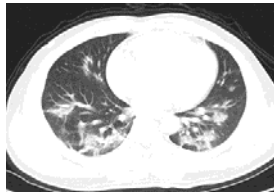
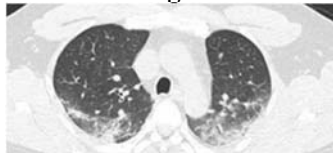


Fig. 8. Covid image classification result for experiment 2

Submitted classification image



Classified Image

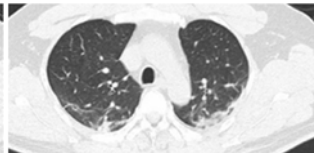


Fig. 9. Covid image classification result for experiment 3

#### IV. CONCLUSION

The report presents an algorithm for classification of Covid images into positive and negative class. To this end, wavelet-based feature vectors are generated on the images from the test image database and the query-image and are used for the classification process using NN. For a complete and accurate assessment of the proposed algorithm research experiments are conducted on parameters accuracy, precision and recall. According to the results obtained, the algorithm reaches high result values for the three parameters and is recommended for the cases when false negative is high.

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