

# Originality report

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COURSE NAME

Internship/SDP-Win-2024-25

STUDENT NAME

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FILE NAME

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1 of 16 passages

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**Submitted in partial fulfillment for the award of the degree of**

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**Submitted in partial fulfillment for award of the degree of.** BACHELOR OF TECHNOLOGY. Session 2008 - 2012. Submitted To: Submitted By: Student's Name. Student ID.

Submitted in partial fulfillment for award of the degree of ... <http://www.gecj.ac.in/Download/Project%20Report%20Format%20CS.pdf>

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2 of 16 passages

Student passage **FLAGGED**

**the** trained model was deployed through a lightweight **Flask web application** that **allows** clinicians **to upload chest X-ray images and receive real-time TB predictions**

[Top web match](#)

Web application **The Flask web application allows** users **to upload chest X-ray images and receive real-time predictions** on whether pneumonia is detected.

Alikhizar142/Pneumonia\_Detection - GitHub [https://github.com/Alikhizar142/Pneumonia\\_Detection](https://github.com/Alikhizar142/Pneumonia_Detection)

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3 of 16 passages

Student passage **FLAGGED**

3. A Better **Densenet Deep Neural Network Model for Tuberculosis Detection** from **Chest X-Ray Images**

[Top web match](#)

An Improved **Densenet Deep Neural Network Model for Tuberculosis Detection** Using **Chest X-Ray Images**. Abstract: Tuberculosis (TB) is a highly ...

An Improved Densenet Deep Neural Network Model ... - IEEE Xplore <https://ieeexplore.ieee.org/document/10108980/>

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4 of 16 passages

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The proposed **model** combines the **Convolutional Block Attention Module (CBAM)** with the **Wide Dense Net (WDnet)** to capture informative **spatial and contextual information** from CXR images

[Top web match](#)

The **model** is based on the **Convolutional Block Attention Module (CBAM)** and the **Wide Dense Net (WDnet)** architecture, which has been designed to effectively **capture spatial and contextual information** in...

An Improved Densenet Deep Neural Network Model ... - IEEE Xplore <https://ieeexplore.ieee.org/document/10108980/>

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5 of 16 passages

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...the study indicate that CBAMWDnet surpasses traditional methods with a high **accuracy of 98.80%, sensitivity of 94.28%, precision of 98.50%, specificity of 95.7%, and F1 score of 96.35**

[Top web match](#)

When tested on a comprehensive dataset, their model surpassed several leading models, achieving an **accuracy of 98.80%, sensitivity of 94.28%, precision of 98.50%, specificity of 95.7%, and an F1 score...**

This is a title - EAI Endorsed Transactions <https://publications.eai.eu/index.php/phat/article/download/5543/3069>

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6 of 16 passages

Student passage FLAGGED

## 5. Deep Learning Models for Tuberculosis Detection from Chest X-ray Images

[Top web match](#)

**Deep Learning Models for Tuberculosis Detection from Chest X-ray Images.** Abstract: This paper explores the usefulness of transfer learning on medical imaging ...

Deep Learning Models for Tuberculosis Detection from Chest X-ray ... <http://ieeexplore.ieee.org/document/8798798/>

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7 of 16 passages

Student passage FLAGGED

**Experimental results** showed **that the proposed approach** is **superior** to conventional transfer learning methods, with **higher accuracy and stability**. The model was evaluated on two popular datasets, the...

[Top web match](#)

The **experimental results** demonstrate **that the proposed approach** achieves **superior** prediction performance in the case of small sample sizes, exhibiting **higher accuracy and stability** compared to...

Comparison-Transfer Learning Based State-of-Health Estimation for ... [https://www.researchgate.net/publication/377996707\\_Comparison-Transfer\\_Learning\\_Based\\_State-of-Health\\_Estimation\\_for\\_Lithium-Ion\\_Battery](https://www.researchgate.net/publication/377996707_Comparison-Transfer_Learning_Based_State-of-Health_Estimation_for_Lithium-Ion_Battery)

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8 of 16 passages

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**The model** was **evaluated on two** popular **datasets**, the **Shenzhen and Montgomery** datasets, **and** obtained competitive **performance compared to the**

[Top web match](#)

**The proposed model** is **evaluated on two** public chest X-ray **datasets: Shenzhen and Montgomery; and** achieves superior **performance compared to the** state-of-art segmentation methods. Specifically, it...

(PDF) Lung Segmentation with Lightweight Convolutional Attention ... [https://www.researchgate.net/publication/390232824\\_Lung\\_Segmentation\\_with\\_Lightweight\\_Convolutional\\_Attention\\_Residual\\_U-Net](https://www.researchgate.net/publication/390232824_Lung_Segmentation_with_Lightweight_Convolutional_Attention_Residual_U-Net)

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9 of 16 passages

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8. Accurate **Tuberculosis Detection Using Chest X-Ray with Deep Learning, Segmentation, and Visualization**

[Top web match](#)

Reliable **Tuberculosis Detection Using Chest X-Ray With Deep Learning, Segmentation and Visualization**. Abstract: Tuberculosis (TB) is a chronic ...

Reliable Tuberculosis Detection Using Chest X-Ray With Deep ... <https://ieeexplore.ieee.org/document/9224622/>

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10 of 16 passages

Student passage FLAGGED

**Images were resized to 224×224 pixels** in order **to meet the input** requirement of DenseNet121. Pixel values were scaled to the [0, 1]

[Top web match](#)

Resizing: **Images were resized to 224×224 pixels to meet the input** size requirements of the models. Grayscale to RGB Conversion: The grayscale chest X-ray images were converted into RGB format to align...

Efficient Classification of Pulmonary Pneumonia and Tuberculosis ... <https://www.medrxiv.org/content/10.1101/2024.12.31.24319820v1.full-text>

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11 of 16 passages

Student passage FLAGGED

**Resizing all images to 224x224 pixels to** be compatible with DenseNet121's **input size**. Scaling pixel values by rescale=1.0 / 255 to scale them...

[Top web match](#)

For the product image dataset, the images were pre-processed to conform to the input requirements of the VGG19 model. This involved **resizing all images to 224x224 pixels to match the input size**...

Original and Resized Image (224x224 pixels). - ResearchGate [https://www.researchgate.net/figure/Original-and-Resized-Image-224x224-pixels\\_fig3\\_383052895](https://www.researchgate.net/figure/Original-and-Resized-Image-224x224-pixels_fig3_383052895)

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12 of 16 passages

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**DenseNet connects each layer to every other layer in a feed-forward** manner, improving parameter efficiency and feature diversity.

[Top web match](#)

Pros Improved feature reuse: **DenseNet connects each layer to every other layer in a feed-forward** fashion. This encourages feature reuse, leading to more efficient and compact models.

DenseNet - Iterate.ai <https://www.iterate.ai/ai-glossary/densenet-convolutional-networks>

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13 of 16 passages

Student passage FLAGGED

$[x_0, x_1, \dots, x_{\ell-1}]$ : **concatenation of feature maps from previous layers**

[Top web match](#)

Considering  $x_0, x_1, \dots, x_{\ell-1}$  as input: where  $[x_0, x_1, \dots, x_{\ell-1}]$  denotes the **concatenation of feature maps produced from previous layers**, respectively.

ChoiceNet: CNN learning through choice of multiple feature map ... <https://d-nb.info/1243383895/34>

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14 of 16 passages

Student passage CITED

$y$ : **true label (0 or 1)**  $\hat{y}$ : predicted probability The function penalizes incorrect predictions more harshly as...

[Top web match](#)

Loss =  $-(y * \log(p) + (1 - y) * \log(1 - p))$ . where  $y$  is the **true label (0 or 1)**;  $p$  is the predicted probability of the class. For multi-label classification with multiple classes, the binary...

Multi-label classification - Medium <https://medium.com/@kitkat73275/multi-label-classification-8d8ae55e8373>

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15 of 16 passages

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**This report contains precision, recall, F1-score, and support for each class.**

[Top web match](#)

Classification Report: **This detailed report** provided metrics such as **Precision, Recall, F1-score, and Support for each class.**

Efficient Classification of Pulmonary Pneumonia and Tuberculosis ... <https://www.medrxiv.org/content/10.1101/2024.12.31.24319820v1.full-text>

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16 of 16 passages

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...the predicted positives, how many were they actually correct? Recall: **Of the actual positives, how many did the model** pick up? F1-score: Harmonic mean of precision and recall. A...

### Top web match

It answers the question, “**Of all the actual positives, how many did the model** correctly identify?” F1 Score: The harmonic mean of precision and recall. It balances the two metrics into a single...

Understanding Precision, Recall, and F1 Score Metrics - Medium <https://medium.com/@piyushkashyap045/understanding-precision-recall-and-f1-score-metrics-ea219b908093>

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