

ACORD TEMA DE LICENTA

Numele și prenumele studentului: Baciu Ioana

Specializarea: informatica in limba romana

Promotia: 2021-2024

Numele și prenumele coordonatorului științific: Diosan Silvia Laura

Domeniul lucrării: Inteligența Artificială

Titlul lucrării: Breast Cancer Detection using CNN

Descrierea temei lucrării de licență:

The thesis aims to determine the accuracy and efficiency of detecting breast cancer in three-dimensional mammogram, known as tomosynthesis, of various patients using GoogLeNet for image classification and EfficientDet for object detection.

The model is trained on the Breast-Cancer-Screening-DBT, containing a vast number of subjects, of which 869 have been selected for this thesis, 500 showing no signs of cancer, 280 having suspicions of cancer, 42 having benign tumors, and the rest 47 having cancer.

Referințe bibliografice:

1. Naji, M. A., El Filali, S., Aarika, K., Benlahmar, E. H., Abdelouahid, R. A., & Debauche, O. (2021). Machine learning algorithms for breast cancer prediction and diagnosis. *Procedia Computer Science*, 191, 487-492.
2. Tan, M., Pang, R., & Le, Q. V. (2020). Efficientdet: Scalable and efficient object detection. In *Proceedings of the IEEE/CVF conference on computer vision and pattern recognition* (pp. 10781-10790).
3. R. Alake(2020), Deep Learning: GoogLeNet Explained. In *Towards Data Science*
<https://towardsdatascience.com/deep-learning-googlenet-explained-de8861c82765>

Data, 05.03.2024

Semnătura studentului,