

International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

Volume 2, Issue 2, July 2022

## Lung Cancer Detection using Machine Learning

Madhushree A<sup>1</sup>, Harshitha Nayaka YS<sup>2</sup>, Chandrika M<sup>3</sup>, Madangowda HS<sup>4</sup>, Mrs. Pallavi J<sup>5</sup>

Students, Department of ECE<sup>1,2,3,4</sup> Assistant Professor, Department of ECE<sup>5</sup> Vidya Vikas Institute of Engineering and Technology, Mysuru, Karnataka, India

**Abstract:** Cancer is a disease in which cells in the body grow out of control. When cancer starts in the lungs, it is called lung cancer. Lung cancer begins in the lungs and may spread to lymph nodes or other organs in the body, such as the brain. Cancer from other organs also may spread to the lungs. When cancer cells spread from one organ to another, they are called metastases.

Keywords: Lung cancer detection, python code, Kaggle, Keras library, Google collab

## REFERENCES

- [1]. Lung Cancer Symptoms, Types, Causes, Treatment & Diagnosis,
- [2]. ICMR-National Institute of Cancer Prevention & Research (ICMRNICPR).
- [3]. The International Agency for Research on Cancer (IARC). Latest global cancer data.
- [4]. Top A.I Algorithms in Health Care-The Medical Futurists., 2019, https://medicalfuturist.com/top-aialgorithms-healthcare/
- [5]. G. Lakshmanaprabu S.K., Sachi Nandan Mohanty, Shankar K., Arunkumar N., Gustavo Ramirez., 2018. Optimal Deep Learning Model for Classification of Lung Cancer on CT Images. Future Generation Computer Systems,
- [6]. Janee Alam, S., & Hossan, A. Multi-Stage Lung Cancer Detection and Prediction Using Multi-class SVM Classifier. 2018 International Conference on Computer, Communication, Chemical, Material and Electronic Engineering (IC4ME2)
- [7]. Janee Alam, S., & Hossan, A. Multi-Stage Lung Cancer Detection and Prediction Using Multi-class SVM Classifier. 2018 International Conference on Computer, Communication, Chemical, Material and Electronic Engineering (IC4ME2)...
- [8]. M.Gomathi, Dr.P.Thangaraj. 2010. A Computer-Aided Diagnosis System for Detection of Lung Cancer Nodules using Extreme Learning Machine. International Journal of Engineering Science and Technology. Vol. 2(10), 2010, 5770- 5779.
- [9]. Kakeda, S., Moriya, J., Sato, H., Aoki, T., Watanabe, H., Nakata, Doi, K. 2004. Improved Detection of Lung Nodules on Chest Radiographs Using a Commercial Computer-Aided Diagnosis System. American Journal of Roentgen logy, 182(2), 505–510. doi:10.2214/ajr.182.2.1820505.
- [10]. Gurcan, M. N., Sahiner, B., Petrick, N., Chan, H.-P., Kazerooni, E. A., Cascade, P. N., & Hadjiiski, L. 2002. Lung nodule detection on thoracic computed tomography images: Preliminary evaluation of a computeraided diagnosis system. Medical Physics, 29(11), 2552–2558. doi:10.1118/1.1515762.