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A Novel Artificial Intelligence Framework for Analysis and Classification of Lung Cancer Images

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ABSTRACT Artificial Intelligence (AI) is an upcoming technology, which is becoming more prevalent in almost all walks of human life. It is no surprise that Artificial Intelligence is being used to solve one of the most complex and dynamic diseases known to mankind – cancer. Lung cancer is a fatal disease to a great degree, claiming millions of lives all around the world every year. Cancer detection and identification is almost always impossible at an early stage. AI is capable of identifying, diagnosing as well as predicting cancer occurrence. The AI framework employs the Deep Learning technique of Convolutional Neural Networks (CNN). This research paper demonstrates the ability of AI and Deep Learning Framework to identify and differentiate between three types of cases, that is, normal, benign and malignant cases. A comparison is done between existing research models applied on the same dataset and the proposed model surpassed the other models by achieving 100 percent training and testing accuracies.