

## Identification of Related Technologies Associated with Asthmatic Wheeze Detection System: A Review

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### Abstract

Breathing difficulties are a common symptom of lung disorders such as Chronic Obstructive Pulmonary Diseases and asthma. Your airways may narrow, swell, and create additional mucus if you have asthma. This may obstruct your airways and cause shortness of breath, coughing, a whistling sound when you exhale, and wheezing. Therefore, wheezing can be used as a crucial diagnostic tool for the identification of various diseases. An individual's respiratory rate increases when they wheeze, and as a result, their lungs are more likely to work harder than they normally would. The presence of low blood oxygen levels, elevated heart rates, increased breathing sounds, increased breathing rates, and coughing can all be utilized to diagnose wheezing in a person. In this study, the aforementioned characteristics are used to identify wheezing in an asthmatic patient. Asthma, a widespread health condition affecting individuals of all ages, poses a significant risk as it claims the lives of many people daily, making it essential to raise awareness, research, and improve management strategies to reduce its impact on public health. With the proper treatment and care, almost all of these fatalities may be prevented. Therefore, this review study contains the study of such systems to determine what technologies can be best in developing this kind of system while considering the accuracy of the systems. After studying these technologies, authors have identified that Neural Networks can be used to develop this kind of system due to their high accuracy of it.

**Keywords:** *Chronic Obstructive Pulmonary Diseases, Asthma, Wheezing, Neural Networks*