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An Assessment of Machine Learning Methods for The Diagnosis of Thyroid Disease

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Abstract: *An infection of the thyroid is a persistent and complicated condition that may be caused by abnormal levels of TSH (Thyroid Simulating Hormone) or may be brought on by problems inside the thyroid organ itself. Hashimoto's thyroid disease is the cause of hypothyroidism that is now the most commonly recognized. During this condition, the body produces antibodies that pulverize the thyroid organ. This condition is considered to be auto-safe. The mechanism that is responsible for the progression of the thyroid condition is not yet fully understood by the medical community. Methods and Investigation: The neural network models that explain the elements connected to the non-functionality of the thyroid gland, its autoimmunisation status, and the many characteristics of thyroid illness have been investigated. The repercussions that are associated with thyroid illness are expanding at a fast rate, and this gives fresh insights into the molecular process that is involved, as well as assistance in the treatment of thyroid disease. In this article, the contribution of several neural network modeling techniques to the identification of thyroid dysfunctionality throughout the course of the last twenty years has been evaluated and reviewed. The findings indicate that a number of different parameter estimate approaches and the execution of the various neural system models have been investigated. Furthermore, in the most recent decades, there has been discussion about the usage of separate brain system models for the purpose of separating the disfunctionalities of thyroid illness.*

Keywords: Machine Learning, Statistical Methods

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