Goitre represents an abnormal enlargement of the thyroid gland . The thyroid is a butterfly-shaped gland located at the base of our neck, right under Adam’s apple , caused by factors such as iodine deficiency or autoimmune disorders, such as Hashimoto’s thyroiditis or Graves’ disease nodular changes within the gland. Some remain asymptomatic and harmless to the patient, while some may give rise to adverse complications such as difficulty in swallowing, breathing, or hormonal imbalance. Early diagnosis of any form of Goiter is required to take up proper clinical management and intervention. Goiter can be diagnosed using a variety of methods, including blood tests, antibody tests, and ultrasonography. In this project, we are proposing a deep-learning-based system for classifying goitre and estimating thyroid volume to help healthcare workers in improving clinical decision-making. The system uses neural networks, Convolutional Neural Networks (CNNs), to predict goitre with respect to clinical data and medical imaging. The approach attempts to improve goitre presence prediction by integrating imaging data with clinical features such as patient history and lab findings. The project deals with training neural network models on a dataset containing goitre ultra sound images and XML files. Thus, this work lays the foundation for accurate early-stage detection of goitre and improved clinical outcomes through deep-learning assisted diagnostic techniques.