



# AIUB DSpace Publication Details

**Title:** Design and Deployment of E-Health System Using Machine Learning in the Perspective of Developing Countries

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## Abstract:

Machine learning is tightening its grasp on many sectors of modern life, and the medical sector is not an exception. In developing countries like Bangladesh, disease classification process mostly remains manual, time consuming, and sometimes erroneous. Designing an e-health system comprised of disease identification model would be a great aid in such circumstances. The automation of identifying the diseases with the help of machine learning will be more accurate and time saving. In this paper, decision tree, gaussian naive-bayes, random forest, logistic regression, k-nn, MLP, and SVM machine learning techniques are applied for three diseases: dengue, diabetes, and thyroid. MLP for dengue, logistic regression for diabetes, and random forest for thyroid performed the best with accuracies of 88.3%, 82.5%, and 98.5%, respectively. Additionally, a medical specialist recommendation model and a medicine suggestion model are also integrated in the proposed e-health system. Copyright © 2022, IGI Global.