Abstract

The need for rapid access to information in order to support critical decisions in public health cannot be disputed; however, development of such systems requires an understanding of the actual informational requirements of the practitioners. This paper explores the application of machine learning techniques for the detection of one of the Arboviral disease – Dengue. This paper reports original biological discovery through nontrivial data mining process by using accessible computational techniques. The goal of the system is to prop up the assortment, and recovery of public health documents, data, learning objects, and tools. We have deployed this standard infrastructure to facilitate data integration and knowledge sharing in the domain of dengue, which is one of the most prevalent Arboviral diseases. The proposed novel technique exhibits highly precise prediction rate (with total Mean Squared Error 0.06665807).

References

- M. S. Chen, J. Han, and P. S. Yu. Data mining: An overview from a database
Exploring Support Vector Machines and Random Forests for the Prognostic Study of an Arboviral Disease

Index Terms

Computer Science   Artificial Intelligence
Keywords
Dengue fever  Data mining  Machine learning techniques  Support Vector Machine  Random Forest  Feature

(SVM)  (RF)  Reduction