

عنوان مقاله:

An Efficient Artificial Intelligence Based Technique in Diseases Staging and Forecasting

مجله پیشرفت در تحقیقات کامپیوتری, دوره 4, شماره 3 (سال: 1392)

تعداد صفحات اصل مقاله: 16

نویسندگان: Negar Ahmadi - Department ofMathematics and Computer Science, University of Perugia, Perugia, Italy

Alfredo Milani - Department of Mathematics and Computer Science, University of Perugia, Perugia, Italy

خلاصه مقاله:

Artificial Intelligence (AI) techniques offer powerful objective algorithms foranalysis of multimodal and highdimensional data. Recently, these techniques havebecome a reliable tool in the medical domain. This paper describes an efficienttechnique for building an application that is capable of forecasting and classifyinghealthcare information using machine learning as a subfield of AI methods. The algorithm predicts a label for each sample. The sample is a single set of feature dataand the label is what category the sample falls into. The algorithm takes many ofthese samples as the training set, builds an internal model and finally predicts thelabels of other samples, called the testing set. We apply this methodology to thebreast cancer staging and also to forecast the myocardial infarction and examinethe risk assessment using fuzzy clustering and Framingham heart study. The resultsshow that the proposed technique obtains credible outputs that could be integratedin an application to be used in the health care field.

كلمات كليدى:

Disease Forecasting, Artificial Intelligence, Computational Biology, Breast Cancer, Myocardial Infarction, Framingham Study

لینک ثابت مقاله در پایگاه سیوپلیکا:

https://civilica.com/doc/488409

