

V. Tampakas, I.E. Livieris, E. Pintelas, N. Karacapilidis and P. Pintelas. [Prediction of students' graduation time using a two-level classification algorithm](#)

. In *IEEE 1st International Conference on Technology and Innovation in Learning, Teaching and Education*, 2018.



**Abstract** - During the last decades, higher educational institutes have managed to accumulate a large volume of data about their students' characteristics and performance. Machine learning techniques offer a first step and a helping hand in extracting useful information from these data and gaining insights into the prediction of students' progress and performance.

In this work, we present a two-level classification algorithm for predicting students' graduation time. The proposed algorithm has two major features. Firstly, it identifies with high accuracy the students at risk of not completing their studies; secondly, it classifies the students based on their expected graduation time. Our preliminary numerical experiments indicate that the proposed algorithm exhibits reliable predictions based on the students' performance in their courses during the first two years of their studies.