

Forecasting the Composition of Demand for Higher Education Degrees by Genetic Algorithms

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In this paper, a genetic algorithm is developed to forecast the relative presence of different university studies in the higher education demand in the field of economics and business/management as a whole. A selection operator is defined that assumes that the better the job opportunities associated with a specific university study, the higher the future demand for such a degree. The other element in the algorithm is a transition matrix that takes other factors into account which may influence on the changes in demand. The proposed algorithm is applied to the original populations of students enrolled on 2005/2006 to 2007/2008 courses. Then, a new algorithm, whose elements are corrected to adjust the forecasts, is applied to obtain the forecast of the demand composition on the 2009/2010 course.