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Development of a student employment forecasting service

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Abstract. The article presents the architecture and software implementation of a service for collecting data and predicting student employment based on a fully connected neural network using the example of graduates of Kabardino-Balkarian State University in areas related to information technology. The service operates as a website and allows to collect, store and analyse data on academic performance, activity, employment and learning conditions of graduates. The presented neural network model predicts the main parameters associated with employment based on the results of a student survey, including the expected level of remuneration, job search time and employee workload. At the same time, the set of input parameters used makes it possible to take into account not only data on academic performance, but also demographic indicators and conditions in the region of the student's studies. Forecasting employment conditions can be used not only to select the direction of training for applicants and build educational trajectories for students, but also to plan changes to the university curriculum. The work provides the structure of the site, the architecture of the neural network and a description of the software implementation of the service.

Keywords: employment, university graduates, web service, neural network, data collection

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