

## УНИВЕРЗИТЕТ У НОВОМ САДУ UNIVERSITY OF NOVI SAD

## **TOP ACHIEVEMENTS 2021**

## "MIHAJLO PUPIN" TECHNICAL FACULTY

"Predicting Entrepreneurial Intentions among the Youth in Serbia with a Classification Decision Tree Model with the QUEST Algorithm"

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Youth unemployment rates present an issue both in developing and developed countries. The importance of analyzing entrepreneurial activities comes from their significant role in economic development and economic growth. In this study, a ten-year research was conducted. The dataset included 5670 participants - students from Serbia. The main goal of the study is to attempt to predict entrepreneurial intentions among the Serbian youth, through analyzing demographics characteristics, close social environment, attitudes, awareness of incentive means, and environ-ment assessment as potential influencing factors. The data analysis included Chi-square, Welch's t-test, z-test, linear regression, binary logistic regression, ARIMA (Autoregressive Integrated Moving Average) regression, and a QUEST (Quick, Unbiased, Efficient, Statistical Tree) classifi-cation tree algorithm. The results are interesting and indicate that entrepreneurial intentions can be partially predicted using the dataset in this current study. Further, most likely due to the ro-bust dataset, the results are not complementary with similar studies, therefore these findings expand the current literature and invite future research.

