

## The IER Seminar in Empirical Economics

We would like to invite you to the **Empirical Seminar** series organized by the Institute of Economic Research, Slovak Academy of Sciences, Šancová 56 that will be held online. The seminar will take place on **October 25th**, **2021 at 14:00**.

The speaker will be *Ing. Zuzana Košťálová, PhD.* (Institute of Economic Research, Slovak Academy of Sciences, Slovakia).

The topic of the seminar is: Online job posting attractiveness: A tool to improve views, reactions and conversions

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## Abstract

The development of e-commerce has not left the labor market unaffected, and employers seeking labor now regularly publish job postings on specialized web portals. Operators of such web portals and employers are interested in increasing the attractiveness of online job postings. However, given the extreme heterogeneity across job types and job seekers, it is difficult for employers and specialized web portal operators to design job postings that lead to higher views, reactions and conversions (the ratio of the two). In collaboration with a leading online job posting platform in Slovakia, we study whether machine learning methods can improve predictions of online job posting attractiveness with a sample of 32482 online job postings that offer as many as 883 job features. Our study shows that the random forest model can achieve considerable prediction improvements over various linear models. Based on this insight, we perform a statistical evaluation of key variables of importance. We find that job classification, job benefits, and variables related to a simple morphological description of the job and job title are relevant. The results of this study can be used to design recommender systems, that help operators of specialized job posting portals and employers to improve their job offers and attract more job seekers.

The seminar will be co-chaired by Mária Širaňová.