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Dominik Ślęzak
University of Warsaw, Poland

## How to Make Big Data Analytics More Interactive?

Big data applications need scalable methods for data exploration and knowledge discovery. The solutions of fundamental KDD tasks which work fine for more standard cases, require to be revised for truly huge and complex data sources. With a growing complexity of the corresponding computational problems, there is also a growing need to interact with the domain experts, to better specify exploration goals which can get narrowed down basing on results obtained so far. With that in regard, there is an ongoing research on how to decompose the workflows of complex data mining processes onto smaller pieces whose outcomes can be iteratively browsed by the users. In this talk, we report some examples of feature selection techniques aimed at the analysis of high dimensional data sets and discuss how user interaction can help to improve them. We also refer to one of our recent projects concerning risk management in coal mines in order to illustrate how modern feature selection algorithms help the end-users to work with big data exploration systems.

### Biography

Dominik Ślęzak received PhD in 2002 from University of Warsaw and DSc in 2011 from Polish Academy of Sciences. In 2005 he co-founded Info bright Inc., where he holds position of Chief Scientist. He is also an Associate Professor at Institute of Mathematics, University of Warsaw. He delivered invited talks at over 20 international conferences. He is co-author of over 150 papers and co-inventor in 5 granted US patents. He serves as Associate Editor for several scientific journals. In 2014 he served as general program chair of IEEE/WIC/ACM Web Intelligence Congress. From 2012-2014 he served as President of International Rough Set Society.

slezak@mimuw.edu.pl

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