

About the method of Component-based Object Comparison for Objectivity

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Abstract. Our presentation is about the methodology of “COCO” “Component-based Object Comparison for Objectivity” a recently developed Hungarian, Linear Programming based context-free similarity analysis method.

The method investigates the connection between the independent variables X_i , $\underline{X} \in \mathbb{R}^n$ and the depending variable $Y \in \mathbb{R}$ – as regression, but with a new idea. A certain variable in this method has not got only one constant multiplicative weight in the approximating formula, but the weight is a staircase function of the variable value. The Linear Programming based methodology constructs this staircase functions depending on the approximating formula type (linear, polynomial, multiplicative, mixed, etc.) the error minimization type (linear or nonlinear least squares, etc.) and other parameters (number of the steps in the staircase, etc.).

This datamining method can handle evaluation, benchmarking, forecasting problems from diverse fields [1, 2, 3].

Since there is an available COCO tool on the net [4], we present how to use that tool, we give some examples [5] to show the scope of the method, and we try to specify the theoretical details of it as well [6]. So at our poster we will provide all information about COCO method to the potential users.

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References

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- [3] Pitlik L.: *Service plan of the Hungarian agricultural Internet link collection (MAIN-FOKA)*, <http://miau.gau.hu/mf/index.html> 2000.
- [4] Pitlik L.: *My-X online services (data mining online, OLAP, online expert systems)* Free version: <http://miau.gau.hu/myx-free>.

- [5] Examples on My-X:
- <http://miau.gau.hu/myx-free/index.php3?x=i07>
- <http://miau.gau.hu/myx-free/index.php3?x=i010>
- <http://miau.gau.hu/myx-free/index.php3?x=i0100>
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