

Human verbal and non-verbal data visualization techniques: a survey

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Abstract. Analysis of human verbal and nonverbal behavioural features entails registration and visualization of huge amounts of data. To objectify their assessment medical, psychoanalytical and security experts require visualization of these data. In this work a brief survey of methods and algorithms for high-dimensional data visualization is presented, including embedded in the software environment tools, memory direct access techniques, decimation and aggregation methods and methods for approximation of the curves that represent these data. We also provide results of development and testing of the two of these methods. The parallel data aggregation algorithm is suggested as the most promising one.

Keywords: data visualization, biometric data, GPU, data reduction

Full text will be available on <http://sntbul.bmstu.ru/>