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Evento	Salão UFRGS 2019: SIC - XXXI SALÃO DE INICIAÇÃO CIENTÍFICA DA UFRGS
Ano	2019
Local	Campus do Vale - UFRGS
Título	VISUAL ANALYSIS AND INTERACTIVE EXPLORATION OF MILLIONS OF EMPLOYMENT RECORDS
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VISUAL ANALYSIS AND INTERACTIVE EXPLORATION OF MILLIONS OF EMPLOYMENT RECORDS

Data analysis is essential in many application areas. Business decisions, optimization strategies, among others, depend on understanding big and heterogeneous data, which is not trivial. The five challenges of big data analysis are volume (the scale of data), velocity (the analysis of streaming data), variety (the different formats of data), veracity (the uncertainty of data) and value (what value the analysis brings to the understanding of data). The main concern in this work is to study how visual data analysis can help to answer queries about data in a real case study. In this work, we create a prototype to understand the dataset of employment activities in Brazil, the CAGED ("Cadastro Geral de Empregados e Desempregados"). We developed our prototype in a data structure for visual big data analysis developed in our research group, called Quantile Datacube Structure (QDS). Using QDS, we demonstrate a prototype that allows the interactive visual analysis of millions of records and illustrates how it can be used to validate and elaborate on different hypothesis over the data.