

IV09\_ABSTRACT  
<POSTER>

**Visualizing Hierarchies: Evaluating the Efficiency and Cognitive Effects of Six Visualization Techniques for Browsing and Management Tasks**

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**Abstract**

Hierarchical data structures are one of the most commonly used data structures in computer science, and therefore numerous methods and techniques have been proposed for their visualization. In this paper, we present our findings from a user study, in which a number of folder visualization environments were evaluated to assess (a) how efficiently a number of tasks can be performed within the different environments (b) the extent to which using a particular visualization may help the user acquire an accurate cognitive image of the hierarchy structure and its contents and (c) the overall user experience from using a particular visualization environment. The visualization environments considered are representative of major visualization paradigms (zoomable user interfaces, context+focus and space-filling), while both 2D and 3D environments have been included.