Analysis of Common Distortion Techniques

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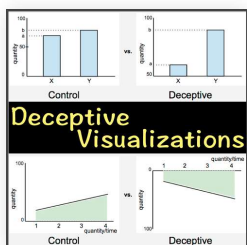👤 Oded Nov, 👤 Enrico Bertini   Authors Info & Affiliations

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ABSTRACT

In this paper, we present an empirical analysis of deceptive visualizations. We start with an in-depth analysis of what deception means in the context of data visualization, and categorize deceptive visualizations based on the type of deception they lead to. We identify popular distortion techniques and the type of visualizations those distortions can be applied to, and formalize why deception occurs with those distortions. We create four deceptive visualizations using the selected distortion techniques, and run a crowdsourced user study to identify the deceptiveness of those visualizations. We then present the findings of our study and show how deceptive each of these visual distortion techniques are, and for what kind of

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paper presents a first step in empirically studying deceptive visualizations, and will pave the way for more research in this direction.

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1. Business insider. http://read.bi/1es12vd/, 2014.

2. Flickr. https://www.flickr.com/photos/oversight/ 8475012926/in/photostream/, 2014.

charts/190225/, 2014.

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Human-centered computing

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