

# Summary of "Process and Pitfalls in writing InfoVis Research Papers"

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## 1 SUMMARY

The paper written by Tamara Munzner collects and sums up the main errors made in writing information visualization papers. She also gives many advice about how to avoid this major errors and how to make a paper more attractive and more likely publishable.

The paper is structured in two main parts: the first in which the author lists and describes the different kind of papers that could be written in information visualization and the second in which she enumerates the main common mistakes made by rejected papers and says how to avoid them.

According to Tamara Munzner there are five different kinds of paper that could be written. The categories are as follows: algorithm ( or technique), design, system, user study and model papers. The main goal in giving this papers taxonomy is to make the authors think more about their topic. In fact, each different research project has its own features and the authors should be able to understand the real reasons why their work is novel and represents a new step in their field. Since the length of papers is limited, reporting the right motivations to the own work is fundamental when writing a paper. To sum up, the validation method is highly important and motivate the own research with the right reasons is a good starting point. As an example, when reporting a novel algorithm or implementation, complexity analysis and timing measurements should be mentioned to prove the better quality of the contribution.

The second part of the paper focuses its attention on technical mistakes more related to infovis field and some mistakes made when the paper is written. She encourages to avoid basic errors in the choice of colors of the visualization or avoid the continuous rainbow colormap. The author made a reflection also about the use of 2D and 3D visualizations. It is not true

that using the 3D is always better than using 2D. In fact, having one more dimension is not always a positive thing, so using 3D when the dataset does not contain it by itself should be explained. Thus, the author claims that each choice should be justified and reasonably motivated. The latest sections of the paper focus their attention on more general mistakes and the author's advice are generally valid and could be applied to each research field in the literature. Researcher should write the paper very carefully and in a logic way. Each step should be explained so that the reader could understand the choices taken and do not get lost while reading the contribution. Researcher should not consider their contribution perfect and should discuss the limits the solution they propose have. Moreover, people should relate their article with the works already published in the literature. In this way, it is possible for the reader to compare the new solutions with the others already existing. Another important feature that an academic article should have is precision. It is better to avoid using general terms when writing, but people should be as much specific as possible. For example, when people describe the dimension of a dataset it is better to avoid adjectives like "huge", "big" or "small" but the writers should point out if we are dealing with hundreds, thousand or millions of tuples. Moreover, especially in this research field, images caption are very important. Her advice is to write very detailed captions so that the images are self-explicable and reader could understand the image quickly and easily.

Finally, the english should be correct and should follow the grammar and syntactic rules of the language. Using appropriate words in the right context make the exposition clearer and easier understandable.