February 9, 2015

Dear Editors of Frontiers in Neuroinformatics,

It is my pleasure to submit the paper “A Multi-Facetted Visual Analytics Tool for Exploratory Analysis of Human Brain and Function Datasets” by Diego Angulo, Cyril Schneider, Nathalie Charpak, James Oliver and Jose Tiberio Hernández. This paper is a technology report containing original research that has not been published or submitted elsewhere. The authors have all read and agreed to the publication of this manuscript.

This work introduces BRAVIZ, a platform for interactive visual analysis of brain data, particularly data derived from MRI images (structural, functional and diffusion) as well as clinical data encoded into numerical and nominal variables. The system enables researchers to efficiently explore data from multiple subjects in order to discover new hypotheses. Currently the neuro-image analysis ecosystem is rich with powerful processing software packages, as well as software built for traditional hypothesis testing applications. However current packages do not efficiently support open ended data exploration. BRAVIZ seeks to close this gap and is meant to complement existing tools by providing an environment for visual data exploration.

As neuro science data becomes increasingly available, new tools for making sense of it will be required. The paper describes the software as it would appear to an end user, describes its architecture and illustrates its functioning with two use cases. The software is written in python and is freely available under a LGLP license.

On behalf of my coauthors, I thank you for your time and consideration, and look forward to addressing any additional questions that you may have.

Diego Angulo

Corresponding Author

IMAGINE

Systems and Computers Engineering

Universidad de los Andes

Please indicate, in the first paragraph, the title of the manuscript, the article type, the Journal and specialty to which the manuscript is being submitted, and whether it is part of a Research Topic. You must also state that the manuscript has not been submitted for publication elsewhere; any closely related works submitted for consideration in other publications should be noted and you may be asked to provide a copy.

It is essential as well that you provide a short description of the significance of the manuscript. While Frontiers evaluates articles using objective criteria, rather than impact or novelty, your cover letter should frame the question(s) you have addressed in your work in the context of the current body of knowledge, providing evidence that the findings - whether positive or negative - contribute to progress in your research discipline. This will assist the Chief Editors to determine whether your manuscript fits within the scope of a specialty as defined in its mission statement; a detailed cover letter will also facilitate the identification of the Editors and Reviewers most appropriate to evaluate your work, ultimately expediting your manuscript's initial consideration.