bioWeb3D: an online webGL 3D data visualisation tool

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Abstract

Background: Data visualization is an important part of biology that sometimes proves to be a bottleneck for non trained researchers. This is especially true when it comes to three dimensional (3D) data representation. Plenty of existing software provide all necessary functionalities to represent and manipulate biological 3D datasets but very few are easily accessible because (web based), cross platform and created for non expert users to quickly and efficiently view 3D data before an eventual finer analysis. **Results:** An online HTML5/webGL based 3D visualisation tool has been developed to allow biologists to quickly and easily view interactive and customizable three dimensional representations of their data along with multiple layers of information. Using the WebGL library Three.js written in Javascript, bioWeb3D allows the simultaneous visualisation of multiple large datasets inputted via a simple JSON file, which can be read and analysed locally thanks to HTML5 capabilities. **Conclusions:** Using basic 3D representation technique in an technologically innovative context (webGL) we are able to provide a program tool that is not intended to compete with professional 3D representation software but can be very useful for a quick and intuitive representation of reasonably large 3D datasets.

Content

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Section title

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Author's contributions

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References

1. Freeman T C BMvDSMPGRFSTJEA Goldovsky L: **Construction, visualisation, and clustering of transcription networks from microarray expression data.** *PLoS Comput Biol.* 2007, **3(10)**:2032–42.

Figures

Figure 1 - Sample figure title

A short [1] description of the figure content should go here.

Figure 2 - Sample figure title

Figure legend text.

Tables

Table 1 - Sample table title

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