

Integration of Anatomical Terms by Network Visualization and Open-source platform

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Abstract: Anatomy is one of the oldest fields in the medical research and has been evolving along with new technologies. However, the Terminologia Anatomica, the current anatomical terminology standard released in 1998, has been perceived with a lot of criticism for inconsistencies and errors.

Meanwhile, information technology has been exponentially progressing, and a quite a lot of progresses are attributed to efforts by community driven open-source projects.

To make anatomical terms more efficient in information technology, we started our new open-source project "NAnaTex (Network of Anatomical Text)", which is aimed to integrate anatomical text-based information from multiple sources to enable it to be edited and reused (rdcu.be/urNZ). We had collected anatomical descriptions from multiple sources to make datasets of bones and muscles, and visualized their interactions using Cytoscape, a graph visualization software. The datasets are available on GitHub and can be reused for other projects.

Keywords: Anatomical terms, Cytoscape, Open-source, GitHub, Network Analysis

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