Title: Interactive network analysis charts in igraph and Python

Supervisor: Fabio Zanini, Data Driven Biomedicine lab (https://fabilab.org)

Timeline: Two months, from around mid-end November 2021 to mid-end January 2022.

Compensation: AUD 2,000-5,000, depending on time effort and skills.

Project description: igraph (https://igraph.org) is a popular and highly optimised network analysis package used across sciences, from mathematics to systems and single cell biology. It provides a number of state-of-the-art algorithms for network clustering, layout, structural analyses, graph traversal, and more. We are a small and highly skilled international team of network scientists in Australia (Fabio Zanini, supervisor), Europe (Vincent Traag, Tamas Nepus, Szabolcs Horvat, Daniel Noom), and the United States (Brooke Faucault) and are looking for an intern to improve and extend documentation and tutorials on graph/network charts, especially interactive charts within Python notebooks and Rstudio. Your tutorials and examples will be read by thousands of network scientists all over the world and be propelling dozens of research projects.

Skills you will learn: Working in a highly interdisciplinary and international research team, programming in Python (and optionally R), cutting-edge data visualisation techniques, and the ethics of open source software. The intern will be guided in all aspects of the project.

Requirements: The candidate should have a background in mathematics, physics, computer or data science. We are looking for a motivated intern, fast-learning, and passionate about science. Experience in programming (preferably Python) is a plus.

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