# Article information:

From Louvain to Leiden: guaranteeing well-connected communities | Scientific Reports
<https://www.nature.com/articles/s41598-019-41695-z/>

# Article summary:

1. The Louvain algorithm is a popular method for detecting communities in complex networks.

2. The Louvain algorithm has a major problem, as it can yield arbitrarily badly connected communities.

3. A new algorithm, the Leiden algorithm, is proposed to address this issue and provide explicit guarantees and bounds on the quality of the partition produced.

# Article rating:

Appears well balanced: The article presents the information in a reliable and balanced way, without biases and prejudices. The claims made in the article are well supported and, where applicable, all sides of the argument are given opportunity to present their point of view. The article appears trustworthy and reliable.

# Article analysis:

The article “From Louvain to Leiden: guaranteeing well-connected communities” provides an overview of the Louvain algorithm and its shortcomings, as well as introducing a new algorithm called the Leiden algorithm which aims to address these issues. The article is written in an accessible way that makes it easy to understand for readers with varying levels of technical knowledge. The authors provide evidence for their claims by citing relevant research papers and providing detailed explanations of their algorithms.

The article does not appear to be biased or one-sided in its reporting, as it presents both sides of the argument fairly and objectively. It also does not contain any promotional content or partiality towards either side of the argument. Furthermore, all possible risks associated with using either algorithm are noted throughout the article.

The only potential issue with this article is that some claims made by the authors are not supported by evidence or data from experiments conducted on real-world networks. This could lead readers to question whether these claims are valid or reliable, as they have not been tested in practice yet. However, this does not detract from the overall trustworthiness and reliability of the article itself, as all other claims made by the authors are backed up by evidence from relevant research papers and experiments conducted on benchmark networks.

# Topics for further research:

* Louvain algorithm performance
* Leiden algorithm performance
* Community detection algorithms
* Network analysis techniques
* Graph clustering algorithms
* Network modularity optimization

# Report location:

<https://www.fullpicture.app/item/385a7970268b716871691019d01aa762>