

## Minimax Linkage Hierarchical Clustering

According to the following benchmarking research about the Minimax Linkage Hierarchical Clustering first introduced by Dr. SIO IONG AO:

Xiao Hui Tai and Kayla Frisoli. Benchmarking Minimax Linkage in Hierarchical Clustering. Data Analysis and Rationality in a Complex World. Springer International Publishing, 2021.

The screenshot shows a web browser displaying a Springer Professional article. The title is "Benchmarking Minimax Linkage in Hierarchical Clustering". The authors are listed as Xiao Hui Tai and Kayla Frisoli. The article is published in "Data Analysis and Rationality in a Complex World" by Springer International Publishing. There is a "Log in" button and a section for "Introducing the latest innovation: AI-assisted Search" with a toggle switch set to "Off". The abstract begins with "Minimax linkage was first introduced by Ao et al. (2004) in 2004, as an alternative to standard linkage methods used in hierarchical clustering."

The following results have been reached:

“Minimax linkage was first introduced by Ao et al. (2004) in 2004, as an alternative to standard linkage methods used in hierarchical clustering ... Similarly to Bien and Tibshirani (2011), we find that minimax linkage often produces the smallest distances to prototypes, meaning that objects in a cluster are tightly clustered around their prototype. This is true across a range of values for the total number of clusters (k) ...”

The free software CLUSTAG and WCLUSTAG, the first real-world application of the minimax linkage hierarchical clustering, is one of the two tools listed in Wikipedia for tag SNP selection:

[https://en.wikipedia.org/wiki/Tag\\_SNP](https://en.wikipedia.org/wiki/Tag_SNP)

(Retrieved 9 March 2024)

The screenshot shows the Wikipedia page for "Tag SNP". The page content includes a "Contents" sidebar, an introduction, a "Tools" section, a "Tagger" section, a "CLUSTAG and WCLUSTAG" section, a "See also" section, and a "References" section. The "CLUSTAG and WCLUSTAG" section states: "In the freeware CLUSTAG and WCLUSTAG, there contain cluster and set-cover algorithm 'CLUSTAG'. Retrieved 9 March 2024. ... sent all the known SNPs in a chromosomal region. The programs are implemented with Java, and th... a Unix environment. They are developed by SIO-IONG AO et al. in The University of Hong Kong." The "See also" section lists: International HapMap Project, Genome-wide association study, Single Nucleotide Polymorphism, and Linkage disequilibrium.