

CM++ - A Meta-method for Well-Connected Community Detection

Ramavarapu [3] describes the codebase for CM [2]. The CM pipeline happens in two stages:

- Run VieCut [1] to find a small edge cut.
- If the edge cut is below some threshold $f(n)$, remove the cut and recluster the partitions
- Repeat...

The codebase is implemented in Python, with support for multiple cores.

References

- [1] Monika Henzinger et al. “Practical Minimum Cut Algorithms”. In: *ACM J. Exp. Algorithmics* 23 (Oct. 2018). ISSN: 1084-6654. DOI: 10.1145/3274662. URL: <https://doi.org/10.1145/3274662>.
- [2] Minhyuk Park et al. “Well-connectedness and community detection”. In: *PLOS Complex Systems* 1.3 (Nov. 2024), pp. 1–25. DOI: 10.1371/journal.pcsy.0000009. URL: <https://doi.org/10.1371/journal.pcsy.0000009>.
- [3] Vikram Ramavarapu et al. “CM++ - A Meta-method for Well-Connected Community Detection”. In: *Journal of Open Source Software* 9.93 (2024), p. 6073. DOI: 10.21105/joss.06073. URL: <https://doi.org/10.21105/joss.06073>.