| Algorithm type | What it does | Example use | Spark example | Neo4j example |
|---|---|---|---|---|
| Triangle Count and Clustering Coefficient | Measures how many nodes form triangles and the degree to which nodes tend to cluster together | Estimating group stability and whether the network might exhibit "small-world" behaviors seen in graphs with tightly knit clusters | Yes | Yes |
| Strongly Connected Components | Finds groups where each node is reachable from every other node in that same group *following the direction* of relationships | Making product recommendations based on group affiliation or similar items | Yes | Yes |
| Connected Components | Finds groups where each node is reachable from every other node in that same group, *regardless of the direction* of relationships | Performing fast grouping for other algorithms and identify islands | Yes | Yes |
| Label Propagation | Infers clusters by spreading labels based on neighborhood majorities | Understanding consensus in social communities or finding dangerous combinations of possible co-prescribed drugs | Yes | Yes |
| Louvain Modularity | Maximizes the presumed accuracy of groupings by comparing relationship weights and densities to a defined estimate or average | In fraud analysis, evaluating whether a group has just a few discrete bad behaviors or is acting as a fraud ring | No | Yes |