**Abstract**

  The maximal clique problem (MCP) is to decide a sub graph of good cardinality. A clique is a sub graph wherein all pairs of vertices are jointly adjoining. The detection of communities in social networks is a challenge. An actual way to version network is maximal cliques, i.e., maximal sub graphs in which every pair of nodes is hooked up via a side. A contemporary method for locating maximal cliques in very big networks is to decompose the network into blocks after which a distributed computation is carried out. Those strategies exhibit a change-off between performance and completeness, focuses decreasing the size of the blocks will enhance performance but some cliques may stay undetected on account that high-degree node, also referred to as hubs, and won't fit with their whole neighborhood into a small block. This paper presents a disbursed method for suitably managing hub nodes and is able to find maximal cliques in huge networks assembly each completeness and efficiency. The method relies on a -level decomposition system. The first degree targets at recursively figuring out and setting apart tractable quantities of the network. The second level similarly decomposes the tractable portions into small blocks. This work focus on maximal clique set of rules for deriving sub-groups from a sports person’s network and makes use of sub graph measures for evaluating the subcommunities. The sub- graph measures used are degree, in-degree, out-degree, closeness, subgraph centrality, Eigen vector centrality, nodal centrality. This research paintings is able to properly locate all maximal cliques, supplied sparsely of the community is bounded, as its miles the case of actual-world social networks. Experiments confirm the effectiveness, performance, and scalability of our answer.