

# Social Network Analysis

Social network analysis (SNA) is the process of investigating social structures through the use of networks and graph theory. It characterizes networked structures in terms of nodes (individual actors, people, or things within the network) and the ties, edges, or links (relationships or interactions) that connect them. Examples of social structures commonly visualized through social network analysis include social media networks, memes spread information circulation, friendship and acquaintance networks business networks, knowledge networks, difficult working relationships, social networks. Social Network is consisting of nodes (referring to actors and vertices in graph theory) which are connected with ties. All the data is collected with SNA software which is used to create maps for analysis. These maps are vertices are closely linked to each other representing the connectivity between nodes and ties. There are three roles in a social networking that is Central connectors, Boundary spanners and Peripheral specialists. The social media is also an application of social networking which is completely based on it. With the help of collecting data of entities through social networking it builds a massive connectivity between multiple entities and link them together. This social media uses the principle of nodes and ties which are the module of SNA. Similarly, within social media and social networking, businesses also flourish. The use of

social networking is a key factor in the modern era of business industry. Now-a-days, suppliers and marketers heavily rely on social networking to improve their sells, establish their brand and most important to interact with the customers readily. With the rapid growth of social networking it also have some adverse impact which is an alarming condition within the flow of social networking that is Cybercrime. Cyber activity is usually occur and is frequently done by cyber criminals to achieve their devilish plan. So they massively use social networking to leak various data, obtaining internal information of the defense system of any country, hacking the account systems of banks and other different functions. In order to prevent cybercrimes, cyber security is working as much as they can. They use the graphing utility for monitoring and analyzing of social network. They continuously recording and collecting the information and data to get through cyber criminals. The social networking is now the frequent tool using in today human life. It is widely use in day-to-day life in business marketing, social connectivity, cyber system, academic purpose and other various uses. The SNA provides a platform to mutually connect and to express and exchange their views. The research is still in progress to ensure the safeguard of one's information and to protect the data.