



## FACULTY DEVELOPMENT PROGRAMME ON

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### Social Networking Analysis

Date: 12-10-2020

Resource Person:

Dr. Atanu Deb

Dean (Students' Affair), CUTM- Paralakhemundi  
&  
Nodal Officer, MANAGE  
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No. of Faculty Participated: 20

#### About the session:

The session starts with some basics about social networking 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.

#### Outcomes:

The programme defines and demonstrates basic and intermediate methods of analysis, including measuring network size, density, cohesion, paths, structural holes and more. We also reference more advanced approaches (e.g. exponential random graph modelling, relational event modelling). As a result of attending this webinar, participants will understand how to make sense of and draw substantive insights from social network data.



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*Organized by :*

Centurion University of Technology and  
Management

**Resource Person**  
**Dr. Atanu Deb**

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centurion university of technology and management  
*Shaping Lives... Empowering Communities...*



# SNA

## Defining Social Network Analysis

Relationship

Mapping

Modeling

SNA is the **mapping** and measuring of **relationships** and flows between **people, groups, organisations, computers** or other information/knowledge processing entities. - (Valdis Krebs, 2002).

Graph theory,

Sharing



## Power Law Distribution

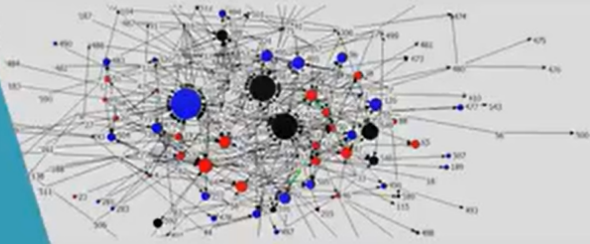
Emergence of a power law in the **degree distribution**  $P(k) \sim k^{-\alpha}$  in **complex networks** is an interesting self-organized phenomenon in complex systems.

Here, the degree **k** means the number of edges incident upon a given vertex. (Goh, 2012)

## SN Diagram: Real World

The Study was conducted at **Ghoramara Island of Sundarban**, India during 2017.

Researchers: **Dr. Atanu Deb (CUTM)**, **Mr. Pritom Das (AU)**



Dr. Prasanta Ku. Mohanty  
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FDP Coordinator