Heidelberg University
Institute of Computer Science
Database Systems Research Group

Lecture: Complex Network Analysis

Prof. Dr. Michael Gertz

Assignment 2

Graph Theory and Networks in Python

`https://github.com/nilskre/CNA_assignments`

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1 Problem 2-1 Adjacency Matrix

Consider an Erdos-Renyi network with N = 80 nodes, connected to each other with probability p = 0.05.

1. What is (i) the expected number of links in the graph and (ii) the expected degree of a node?

   Undirected, because the adjacency matrix is symmetric.