Parallel and Distributed Systems

Assignment 4

Community Structures of Three Random Network Models

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Introduction

 Networks come in many forms, but there is no denying they are all around us. From computer science to sociology and biology, more and more scientific fields use graphs to represent the inner workings that define large structures. Naturally occurring networks have been found to have many properties including, but not limited to, the small world, the clustering, and the heavy tailed degree distribution property. Several random models have been proposed that address one or more of these properties, three of which will be analyzed in this assignment.

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