Ministry of Higher Education and Scientific Research

University of Babylon

information technology collage

Information Networks Department

Study: (morning)

تحليل وسائل الأعلام الأجتماعية

Social Media Analysis

مشروع التخرج هو احد متطلبات الحصول على درجة البكالوريوس في تخصص شبكات المعلومات في تكنولوجيا المعلومات.

A Graduate Project Submitted to the department of Information Networks of the College of Information Technology, University of Babylon, in Partial Fulfillment of the Requirements for the Bachelor's degree in the Information Networks of Information Technology.

أسم الطالب الثلاثي واللقب

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Abstract

The project focuses on applying Social Network Analysis (SNA) techniques to understand and analyze social networks with a specific emphasis on identifying network diameter, and temporal changes within the network structure.

In many social contexts, understanding the overall reach of the network (network diameter), and observing how the network evolves over time are crucial for various purposes, such as targeted marketing, opinion diffusion, or organizational effectiveness.

Determining the network diameter, or the greatest distance between any two nodes in the network, is the primary goal of this effort. This measure sheds light on the network's overall connection and information-dissemination effectiveness. It is necessary to split the networks into intervals and then measure the analytic tools, such as diameter, density, and average degree, in order to record changes in the network structure over time. The dense interactions among nodes over time require the diameter to decrease. Lastly, Gephi software has been used to visualize the network intervals. This work has investigated the networks of Facebook, Wikipedia, and Bitcoin