

College network

Course Assignment N.13

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https://github.com/USI-Projects-Collection/DA-College_network.git

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Introduction

This document outlines the structure of the analysis on a dataset of private messages exchanged on a UC Irvine social network.

To run the code and reproduce the figures or outputs, please refer to the README.md file for setup and execution instructions.

1 Data Analysis

1.1 Setup and Data Loading

1.2 Data Exploration

1.2.1 Basic Statistics

1.2.2 Message Frequency Over Time

1.3 Network Construction

1.3.1 Degree Analysis

1.3.2 Identifying Isolated and One-Way Nodes

1.4 User Analysis

1.4.1 Top Senders and Receivers

1.4.2 PageRank Centrality

1.4.3 Edge Reciprocity

1.5 Temporal Analysis

1.5.1 Messages by Weekday

1.5.2 Top User Activity Analysis

2 Netwrok Analysis