Question 1.1, Problem Set 0, CS224W

The number of nodes in the network: 7115

The number of nodes with a self-edge: 0

The number of directed edges in the network: 103689

Question 1.4, Problem Set 0, CS224W

The number of undirected edges in the network: 100762

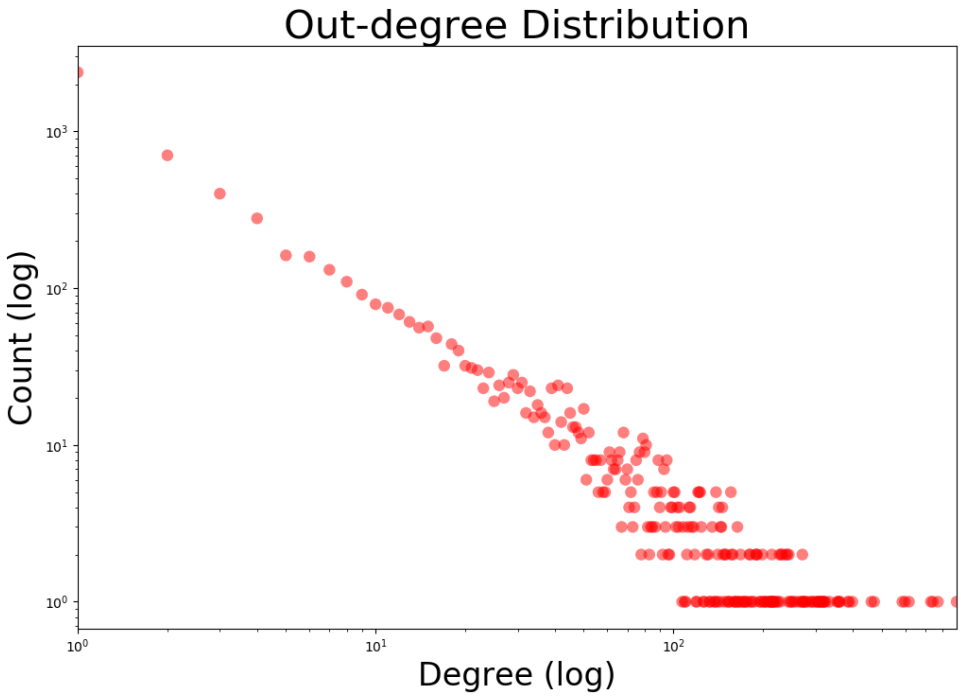
The number of reciprocated edges in the network: 2927

The number of nodes of zero out-degree: 1005

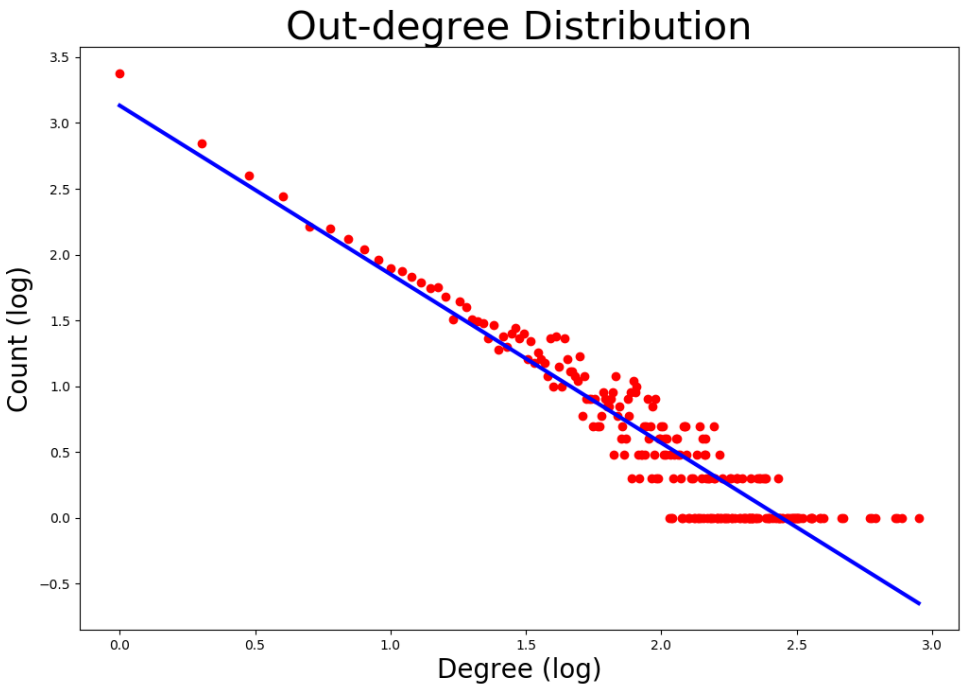
The number of nodes of zero in-degree: 4734

The number of nodes with more than 10 outgoing edges (out-degree > 10): 1612

The number of nodes with fewer than 10 incoming edges (in-degree < 10): 5165


Out-degree Distribution
Count (log)
Degree (log)
10^0
10^1
10^2
10^3

a = -1.2810647056745657
b = 3.1324547044999123



Number of Weakly Connected Components: 10143

Number of MxWcc Edges: 322486
Number of MxWcc Nodes: 131188

Question 3.3, Problem Set 0, CS224W

The top 3 most central nodes in the network by PagePank scores:

Node 992484, 135152, 22656

Question 3.4, Problem Set 0, CS224W

The top 3 hubs in the network by HITS score:

Node 892029, 1194415, 359862

Information sheet
CS224W: Analysis of Networks

Assignment Submission Fill in and include this information sheet with each of your assignments. This page should be the last page of your submission. Assignments are due at 11:59pm and are always due on a Thursday. All students (SCPD and non-SCPD) must submit their homeworks via GradeScope (http://www.gradescope.com). Students can typeset or scan their homeworks. Make sure that you answer each (sub-)question on a separate page. That is, one answer per page regardless of the answer length. Students also need to upload their code at http://snap.stanford.edu/submit. Put all the code for a single question into a single file and upload it. Please do not put any code in your GradeScope submissions.

Late Homework Policy Each student will have a total of *two* free late periods. *Homeworks are due on Thursdays at 11:59pm PDT and one late period expires on the following Monday at 11:59pm PDT.* Only one late period may be used for an assignment. Any homework received after 11:59pm PDT on the Monday following the homework due date will receive no credit. Once these late periods are exhausted, any assignments turned in late will receive no credit.

Honor Code We strongly encourage students to form study groups. Students may discuss and work on homework problems in groups. However, each student must write down their solutions independently i.e., each student must understand the solution well enough in order to reconstruct it by him/herself. Students should clearly mention the names of all the other students who were part of their discussion group. Using code or solutions obtained from the web (github/google/previous year solutions etc.) is considered an honor code violation. We check all the submissions for plagiarism. We take the honor code very seriously and expect students to do the same.

Your name: _____

Email: _____ **SUID:** _____

Discussion Group: _____

I acknowledge and accept the Honor Code.

(Signed) _____