

Degree Sequences Beyond Power Laws in Complex Networks

Zhanying Zhang
School of Computer Science and Engineering
South China University of Technology
Guangzhou 510006, China
E-mail: wjxiao@scut.edu.cn

Wenjun Xiao*
School of Software Engineering
South China University of Technology
Guangzhou 510006, China
E-mail: wjxiao@scut.edu.cn
*Corresponding author

Guanrong Chen
Department of Electronic Engineering
City University of Hong Kong
Kowloon, Hong Kong SAR, China
E-mail: eggchen@cityu.edu.hk

Appendix (Data Source: <http://www.stats.gov.cn/tjsj/tjgb/rkpcgb/dfkpcgb/>)

rank	city	population
1	Chongqing	28846200
2	Shanghai	23019100
3	Beijing	19612400
4	Chengdu	14047600
5	Tianjin	12938200
6	Guangzhou	12700800
7	Baoding	11194400
8	Harbin	10636000
9	Suzhou	10466000
10	Shenzhen	10357900
11	Nanyang	10263000
12	Shijiazhuang	10163800
13	Linyi	10039400
14	Wuhan	9785400
15	Handan	9174700
16	Wenzhou	9122100
17	Weifang	9086200
18	Zhoukou	8953200
19	Qingdao	8715100
20	Hangzhou	8700400
21	Zhengzhou	8626500
22	Xuzhou	8580500
23	Xi'an	8467800
24	Ganzhou	8368400
25	Heze	8287800

26	Dongguan	8220200
27	Quanzhou	8128500
28	Shenyang	8106200
29	Jining	8081900
30	Nanjing	8004700
31	Changchun	7677100
32	Ningbo	7605700
33	Fuyang	7600000
34	Tangshan	7577300
35	Shangqiu	7362500
36	Nantong	7282800
37	Yancheng	7260200
38	Zhumadian	7230700
39	Foshan	7194300
40	Hengyang	7141500
41	Cangzhou	7134100
42	Fuzhou	7115400
43	Xingtai	7104100
44	Shaoyang	7071800
45	Changsha	7044100
46	Zhanjiang	6993300
47	Yantai	6968200
48	Jinan	6814000
49	Dalian	6690400
50	Nanning	6661600
51	Shangrao	6579700
52	Luoyang	6549500
53	bijie	6536400
54	Kunming	6432000
55	Wuxi	6372600
56	Nanchong	6278600
57	Huanggang	6162100
58	Zunyi	6127000
59	Xinyang	6108700
60	Taizhou	5968800
61	Jieyang	5877000
62	Qujing	5855000
63	Maoming	5817800
64	Liaocheng	5789900
65	Changde	5717200
66	Xinxiang	5707800
67	Hefei	5702000
68	Jingzhou	5691700
69	Lu'an	5612000
70	Dezhou	5568200
71	Xiangyang	5500300
72	Tai'an	5494200

73	Yulin	5487400
74	Yueyang	5477900
75	Dazhou	5468100
76	Yichun	5419600
77	Suihua	5416400
78	Shantou	5391000
79	Qiqihar	5367000
80	Jinhua	5361600
81	Suzhou	5353000
82	Anqing	5311000
83	Weinan	5286100
84	Zhaotong	5213000
85	Yongzhou	5180200
86	Anyang	5172800
87	Yuncheng	5134800
88	Nanchang	5042600
89	Shaoxing	4912200
90	Pingdingshan	4904400
91	Xianyang	4894800
92	Bozhou	4851000
93	Xiaogan	4814500
94	Ji'an	4810300
95	Zhangzhou	4810000
96	Huai'an	4799900
97	Guilin	4748000
98	Huaihua	4741900
99	Jiujiang	4728800
100	Suqian	4715600
101	Kaifeng	4676200
102	Taizhou	4618600
103	Mianyang	4613900
104	Huizhou	4597000
105	Changzhou	4592000
106	Chenzhou	4581800
107	Liangshan	4532800
108	Zibo	4530600
109	Jiaxing	4501700
110	Honghe	4501000
111	Yibin	4472000
112	Yangzhou	4459800
113	Jiangmen	4448900
114	Jilin	4414700
115	Lianyungang	4393900
116	Langfang	4358800
117	Zhangjiakou	4345500
118	Chifeng	4341200
119	Hengshui	4340800

120	Guiyang	4324600
121	Linfen	4316600
122	Yiyang	4313100
123	Xuchang	4307200
124	Meizhou	4240100
125	Luzhou	4218400
126	Taiyuan	4201600
127	Guigang	4118800
128	Yichang	4059700
129	Kashi	3979400
130	Chuzhou	3938000
131	Zhaoqing	3918100
132	Fuzhou	3912300
133	Chaohu	3873000
134	Zhuzhou	3855600
135	Loudi	3785600
136	Liuzhou	3758700
137	Xiangtan	3748600
138	Binzhou	3748500
139	Zaozhuang	3729300
140	Lvliang	3727100
141	Baoji	3716700
142	Neijiang	3702800
143	Qingyuan	3698400
144	Ziyang	3665100
145	Anshan	3645900
146	Lanzhou	3616200
147	Deyang	3615800
148	Puyang	3598500
149	jiaozuo	3539900
150	Xiamen	3531300
151	Wenshan	3518000
152	Qiandongnan	3480600
153	Chengde	3473200
154	Bose	3466800
155	Dali	3456000
156	Hanzhong	3416200
157	Siping	3386300
158	Hechi	3369200
159	Yulin	3351400
160	Shiyan	3340800
161	Changzhi	3334600
162	Datong	3318100
163	Enshi	3290300
164	Bazhong	3283800
165	Tianshui	3262500
166	Suining	3252600

167	Jinzhong	3249400
168	Leshan	3235800
169	Qiannan	3231200
170	Guang'an	3205500
171	Bengbu	3164000
172	Tongliao	3139200
173	Jinzhou	3126500
174	Zhongshan	3120900
175	Zhenjiang	3113400
176	Urumqi	3110300
177	Tongren	3092400
178	Qinzhou	3079700
179	Xinzhou	3067500
180	Chaoyang	3044600
181	Qinhuangdao	2987600
182	Heyuan	2953000
183	Meishan	2950500
184	Shanwei	2935700
185	Daqing	2904500
186	Huzhou	2893500
187	Wuzhou	2882200
188	Songyuan	2881100
189	Jingmen	2873700
190	Hohhot	2866600
191	Liupanshui	2851200
192	Shaoguan	2826600
193	Ningde	2822000
194	Qianxinan	2805900
195	Weihai	2804800
196	Rizhao	2801100
197	Mudanjiang	2798700
198	Putian	2778500
199	Tieling	2717700
200	Dingxi	2698600
201	Chuxiong	2684000
202	Zigong	2678900
203	Chaozhou	2669800
204	Baotou	2650400
205	Nanping	2645500
206	Ankang	2629900
207	Huludao	2623500
208	Longnan	2567700
209	Longyan	2559500
210	Jiamusi	2552100
211	Hulunbeier	2549300
212	XiangXi	2547800
213	Luohe	2544100

214	Pu'er	2543000
215	Xuancheng	2533000
216	Baoshan	2506000
217	Sanming	2503400
218	Guangyuan	2484100
219	Yili	2482600
220	Xianning	2462600
221	Dandong	2444700
222	Lincang	2430000
223	Huangshi	2429300
224	Yingkou	2428500
225	Yangjiang	2421800
226	Akesu	2370900
227	Yunfu	2360100
228	Shangluo	2341700
229	Huainan	2334000
230	Tonghua	2325200
231	Yuxi	2304000
232	Anshun	2297300
233	Jincheng	2279200
234	Yanbian	2271600
235	Wuhu	2263000
236	Sanmenxia	2233900
237	Qingyang	2211200
238	Xining	2208700
239	Yan'an	2187000
240	Suizhou	2162200
241	Ulanqab	2143600
242	Fushun	2138100
243	Quzhou	2122700
244	Lishui	2117000
245	Huaibei	2114000
246	Laibin	2099700
247	Pingliang	2068000
248	Haikou	2046200
249	Dongying	2035300
250	Baicheng	2033100
251	Hetian	2014400
252	Chongzuo	1994300
253	Yinchuan	1993100
254	Hezhou	1954100
255	Linxia	1946700
256	Ordos	1940700
257	jixi	1862200
258	Liaoyang	1858800
259	Pingxiang	1854500
260	Fuxin	1819300

261	Wuwei	1815100
262	Shuozhou	1714900
263	Benxi	1709500
264	Baiyin	1708800
265	Heihe	1673900
266	Bayannur	1669900
267	Hinggan	1613300
268	Jingdezhen	1587500
269	Hebi	1569100
270	Zhuhai	1560200
271	Beihai	1539300
272	Ya'an	1507300
273	Zhangjiajie	1476500
274	Shuangyashan	1462600
275	Changji	1428600
276	Chizhou	1403000
277	Haidong	1396800
278	Panjin	1392500
279	Yangquan	1368500
280	Ma' anshan	1366000
281	Huangshan	1359000
282	Laiwu	1298500
283	Baishan	1296600
284	Bayingolin	1278500
285	Wuzhong	1273800
286	Lijiang	1245000
287	Guyuan	1228200
288	Tacheng	1219200
289	Panzhuhua	1214100
290	Dehong	1211000
291	Zhangye	1199500
292	Liaoyuan	1176600
293	Yichun	1148100
294	Xinyu	1138900
295	Banna	1134000
296	Yingtian	1124900
297	Zhoushan	1121300
298	Jiuquan	1095900
299	Ganzi	1091900
300	Zhongwei	1080800
301	Hegang	1058700
302	Ezhou	1048700
303	Xilingol	1028000
304	Qitaihe	920400
305	Aba	898700
306	Fangchenggang	866900
307	Tongchuan	834400

308	Shizuishan	725500
309	Tongling	724000
310	Shigatse	703300
311	Gannan	689100
312	Sanya	685400
313	Jiyuan	675700
314	Changdu	657500
315	Turpan	622700
316	Altay	603300
317	Kumul	572400
318	Lhasa	559400
319	Nujiang	534000
320	Wuhai	532900
321	Kizilsu	525600
322	Daxinganling	511600
323	Haixi	489300
324	Jinchang	464100
325	Nagqu	462400
326	Bortala	443700
327	Hainan	441700
328	Diqing	400000
329	Karamay	391000
330	Yushu	378400
331	Shannan	329000
332	Haibei	273300
333	Huangnan	256700
334	Jiayuguan	231900
335	Alxa	231300
336	Yanglingshifan	201200
337	Nyingchi	195100
338	Guoluo	181700
339	Ngari	95500