APPENDIX G

The optimal weight for SDOF Clough-Johnston hysteretic system ($\alpha = 0.1$) with unknown damping

Table G The optimal weight for SDOF Clough-Johnston hysteretic system ($\alpha = 0.1$) with unknown damping

u_{ih}	1	2	3	4	5	6
1	0.3986566145	0.1145753836	0.3766096056	0.0527092641	-0.5450116683	-0.6392139820
2	-1.1791396155	0.8210917270	-0.1790060595	0.8596508982	0.6569901836	-0.0749539037
3	-0.0228185165	-0.6016746006	0.0740718153	0.1610350831	-0.7331276472	0.0666801812
4	0.1032093150	1.0845508955	0.7820101318	0.3082028463	0.6485613627	1.0292467999
5	-0.4383543884	0.3454147258	0.0409224223	1.0183323755	-0.0350791078	0.6641866987
6	0.0606091635	-0.2570150499	0.1656163808	0.1233346030	0.1194804712	-0.9101980653
7	0.6701815474	0.3882595421	0.4717629564	0.4635055131	0.0317617721	0.6204784004
8	-0.4709936434	1.1988991730	0.2250611867	0.3034976649	0.3156320491	1.5543687977
9	-0.6705487785	0.0705649812	-0.7611023604	-0.1663796615	-1.3320027464	1.9924200721
10	0.1739488898	-0.2816515485	0.3901013133	0.0234158306	0.0799038323	0.5162887672

u_{ih}	7	8	9	10	11	12
1	-0.3127436907	0.1131027067	0.4622013313	1.6558012216	0.1826870478	0.8070841995
2	-0.5851740171	-0.4173451102	0.2918983102	1.3841301525	-0.8512036093	0.1990637539
3	0.1101312981	-0.6745245068	-0.1031086904	-0.7452590814	-0.2200658978	0.0813567300
4	-0.5601485792	-0.0772845283	-0.2967593841	-1.1584747741	-0.8867664715	-0.6614026666
5	0.5375428423	-0.7003539112	0.2293228279	0.4142055682	-0.0399300814	-0.4389270581
6	-0.3177923858	-0.7642098127	-0.9726861965	0.3208891434	-0.0333544287	-0.2390644444
7	0.1836560384	-0.3351624346	-1.4603044550	1.2460366745	-0.0182751026	-0.3131066080
8	1.8336371863	1.4838128836	1.4328306131	1.1377782481	0.9370685114	0.6368626757
9	1.8559925201	1.6201917728	1.7563579297	1.8016490634	-0.8101049918	-0.0794400623
10	0.5557550334	-0.3073287120	-0.1209225201	0.1595164259	-0.0007821817	0.8621333838

v_{hj}	1	2	3	4	5	6
1	-0.0447912155	0.6135727451	-0.1026463823	0.0600117546	-0.0394700296	0.8237516226
2	-0.7141875653	0.0366654387	-1.0517615037	0.2263638736	-1.2103831305	-0.8865791262
3	-0.3822890761	-0.7602342875	0.0846800469	0.2590613882	0.0669145148	-0.1959218249
4	0.0894799391	1.3062853587	0.9787570030	-0.5633159882	-1.1328375708	-0.0896070224
5	-0.0011225548	0.5673743751	-0.0399655471	-0.0013108565	-0.0363393015	-0.0866915996
6	-0.4270400640	0.6524487169	-0.4675016876	-0.4338928048	0.3503116564	-0.7379503085
7	-0.2235158958	0.5922102867	-0.1342675211	0.1355620839	-0.0739478194	0.0420823303
8	0.4433552553	-0.5269070340	-0.3297627757	0.5806270372	-0.9461100057	-0.5973346200
9	-0.1779901267	-0.6644836567	-0.4654680043	-0.4896627501	0.1808017882	0.0701935132
10	0.0344240595	0.5054505883	-0.2569069804	-0.5371347463	0.4009849265	0.0180083623

Table G (Continued)

v_{hj}	7	8	9	10	11
1	-0.7051258306	0.5711437807	-0.5002273289	-0.1001439392	-0.1983920721
2	0.1440269336	0.1389031486	-0.9420722508	-2.4464322075	-0.0175603471
3	0.4545749358	1.1138061078	0.2015346307	-0.4935282192	0.5534499246
4	1.0691123677	1.1467157919	-2.0777586395	-0.7204477282	0.3170606751
5	-1.1099221032	0.9030918176	-0.7627456086	-0.2195303449	1.1293297734
6	-0.4338267050	-0.0209496217	-0.4981018078	0.1957838314	-0.4372607733
7	0.7192812649	-0.1487799353	-0.7190825026	0.3056218295	0.0083315431
8	-0.1999968615	-0.0426655696	0.7558776655	-0.7285529696	-0.6671821825
9	-0.7311649020	0.3131430155	0.5374523550	-0.1391067006	0.2417305233
10	0.1506189289	-0.6917636889	1.1445707797	-0.0185527627	0.0722385514

w_j	
1	-0.16491957
2	0.422610497
3	-0.7488561
4	-0.37694528
5	0.850904646
6	0.759975055
7	0.015591619
8	-0.17296465
9	-0.60816573
10	0.223000191
11	0.404128811