

Table I. GPU Performance with Maximum and Minimum range with number of units hidden layer and number of units using Radial Basic Function

Function for Hidden Layer: Normalized radial basis function														
Overlap Among Hidden Units: Automatic compute the amount of overlap to allow														
Number of Units in Hidden Layer Range		Number of Units	Independent Variable Importance											
			GPU Memory Access		Memory Bandwidth		Throughput		Power Consumption		Temperature		Clock Speed	
Maximum	Minimum		Importance	Normalized Importance	Importance	Normalized Importance	Importance	Normalized Importance	Importance	Normalized Importance	Importance	Normalized Importance	Importance	Normalized Importance
2	3	2	0.097	45.4%	0.187	87.6%	0.152	71.5%	0.205	96.2%	0.146	68.5%	0.213	100.0%
3	4	3	0.218	80.8%	0.070	26.0%	0.138	51.0%	0.270	100.0%	0.041	15.1%	0.264	97.7%
4	5	4	0.086	20.4%	0.085	20.2%	0.169	40.1%	0.143	34.0%	0.098	23.2%	0.420	100.0%
5	6	5	0.131	54.2%	0.163	67.1%	0.237	97.8%	0.242	100.0%	0.099	40.7%	0.127	52.5%
6	7	6	0.161	89.0%	0.180	100.0%	0.179	99.2%	0.164	91.0%	0.154	85.5%	0.162	89.6%
7	8	7	0.134	51.7%	0.220	84.8%	0.260	100.0%	0.141	54.4%	0.113	43.5%	0.132	50.8%
8	9	8	0.137	57.8%	0.161	68.2%	0.173	73.5%	0.144	60.9%	0.149	63.3%	0.236	100.0%
9	10	9	0.132	55.1%	0.215	89.9%	0.239	100.0%	0.094	39.3%	0.177	74.0%	0.144	60.1%
10	11	10	0.214	100.0%	0.168	78.5%	0.177	82.6%	0.200	93.1%	0.137	64.0%	0.103	48.1%
11	12	11	0.160	89.9%	0.174	97.5%	0.179	100.0%	0.171	95.8%	0.145	81.0%	0.171	95.8%
12	13	12	0.170	83.2%	0.204	100.0%	0.201	98.3%	0.167	81.9%	0.129	63.2%	0.129	63.3%
13	14	13	0.231	100.0%	0.216	93.1%	0.074	32.1%	0.109	47.2%	0.172	74.4%	0.197	85.2%
14	15	14	0.134	61.4%	0.211	96.3%	0.219	100.0%	0.143	65.1%	0.159	72.6%	0.134	61.4%
15	16	15	0.055	15.8%	0.232	66.5%	0.183	52.5%	0.081	23.1%	0.349	100.0%	0.101	28.9%
16	17	16	0.107	40.0%	0.163	61.2%	0.266	100.0%	0.202	76.0%	0.159	59.8%	0.103	38.6%
17	18	17	0.133	46.4%	0.135	47.0%	0.287	100.0%	0.178	62.0%	0.167	58.1%	0.100	34.8%
18	19	18	0.127	50.5%	0.153	60.7%	0.252	100.0%	0.191	76.0%	0.155	61.6%	0.122	48.4%
19	20	19	0.111	42.6%	0.200	76.6%	0.260	100.0%	0.169	64.9%	0.166	63.9%	0.094	36.1%
20	21	20	0.112	46.4%	0.139	57.8%	0.241	100.0%	0.201	83.4%	0.151	62.7%	0.156	64.6%