

Project 6a

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Width	CPU frames	GPU frames	Time(secs)
500	0	640	0.5895
500	16	624	0.5689
500	32	608	0.7306
500	48	592	0.9490
500	64	576	1.2109
500	80	560	1.3512
500	96	544	1.5850
500	112	528	1.8335
500	128	512	1.9604
500	144	496	2.1895
500	160	480	2.1623
500	176	464	2.5832
500	192	448	2.8419
500	208	432	2.8708
500	224	416	3.0668
500	240	400	3.4232
500	256	384	3.6750
500	272	368	3.7711
500	288	352	3.6528
500	304	336	4.2066
500	320	320	4.3197
500	336	304	4.5537
500	352	288	4.6569
500	368	272	4.8519
500	384	256	4.6549
500	400	240	4.3700
500	416	224	5.3849
500	432	208	5.0703
500	448	192	5.4459
500	464	176	5.3523
500	480	160	5.6331
500	496	144	6.0280
500	512	128	5.8165
500	528	112	5.8697
500	544	96	5.6374
500	560	80	6.4407
500	576	64	6.2694
500	592	48	6.6959
500	608	32	7.1902
500	624	16	7.3102
500	640	0	4.9417

Pixel computation is much more efficient using GPU. The time when GPU did all the computation was almost the lowest and increased very consistently as the CPU workload increased. The time decreased significantly when GPU reached 0 because there was no communication overhead between the CPU/GPU.

The best CPU/GPU distribution was CPU-16, GPU-624. It is only 0.0206 seconds faster than just using the GPU