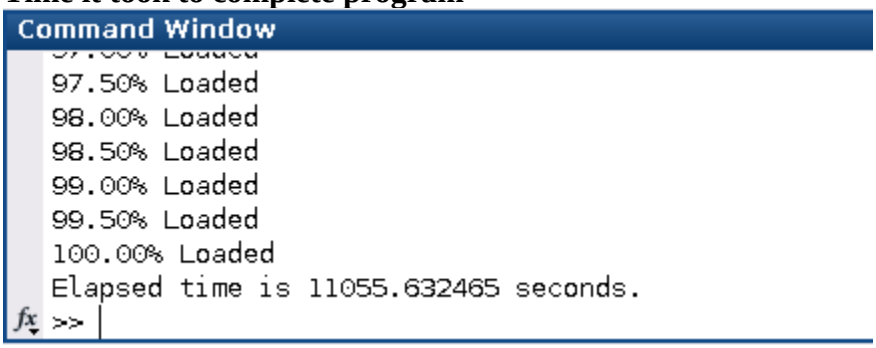
Time it took to complete program



11055.632465 seconds = 3 hours 4 minutes 15.632465000000593 seconds

---

Profile Summary

Generated 01-Jun-2018 20:39:01 using performance time.

Function Name	Calls	**Total Time**	Self Time*	Total Time Plot (dark band = self time)
GPU_Sort_Data	1	11055.707 s	86.665 s	
getframe	201	10402.723 s	3482.714 s	
Scatter.doUpdate	201	6327.165 s	6305.808 s	
graphics/private/alternateGetframe	201	585.230 s	0.060 s	
getframeWithDecorations	201	585.166 s	585.127 s	
scatter3	201	559.943 s	0.463 s	
newplot	201	558.438 s	0.897 s	
newplot>ObserveAxesNextPlot	201	557.483 s	0.055 s	
cla	201	557.427 s	0.061 s	
graphics/private/clo	201	557.283 s	557.283 s	
Scatter.Scatter>Scatter.set.MarkerHandle	201	20.371 s	20.371 s	
Scatter.getXYZDataExtents	201	7.568 s	0.985 s	
...VideoWriter>VideoWriter.writeVideo	201	5.572 s	0.488 s	

GPU_Sort_Data (Calls: 1, Time: 11055.707 s)

Generated 01-Jun-2018 20:43:34 using performance time.
script in file /home/eemaj/jborja/EE147_PROJECT/GPU_Sort_Data.m
Copy to new window for comparing multiple runs

Refresh

☑ Show parent functions ☑ Show busy lines ☑ Show child functions
☑ Show Code Analyzer results ☑ Show file coverage ☑ Show function listing

Parents (calling functions)
No parent

Lines where the most time was spent

Line Number	Code	Calls	Total Time	% Time	Time Plot
40	`currentFrame = getframe(h);`	201	10402.754 s	94.1%	
35	`scatter3(coordinate(:,1,i),coo...`	201	561.956 s	5.1%	
9	`load('data_new.mat')`	1	61.381 s	0.6%	
12	`K_Kern = parallel.gpu.CUDAKern...`	1	22.634 s	0.2%	
42	`writeVideo(obj,currentFrame);`	201	5.576 s	0.1%	
All other lines			1.405 s	0.0%	
Totals			11055.707 s	100%	

Children (called functions)

Function Name	Function Type	Calls	Total Time	% Time	Time Plot
getframe	function	201	10402.723 s	94.1%	
scatter3	function	201	559.943 s	5.1%	
...VideoWriter>VideoWriter.writeVideo	class method	201	5.572 s	0.1%	
...ideoWriter>VideoWriter.VideoWriter	class method	1	0.521 s	0.0%	
handleKernelArgs	function	1	0.084 s	0.0%	
view	function	201	0.071 s	0.0%	
defaultGPUIndex	function	1	0.062 s	0.0%	
daspect	function	201	0.031 s	0.0%	
...iter.VideoWriter>VideoWriter.close	class method	1	0.025 s	0.0%	
VideoWriter.VideoWriter>VideoWriter.open	class method	1	0.006 s	0.0%	
...eManager>GPUDeviceManager.selected	class method	1	0.004 s	0.0%	
Self time (built-ins, overhead, etc.)			86.665 s	0.8%	
Totals			11055.707 s	100%	

Code Analyzer results
No Code Analyzer messages.

Coverage results

Show coverage for parent directory

Total lines in function	48
Non-code lines (comments, blank lines)	21
Code lines (lines that can run)	27
Code lines that did run	27
Code lines that did not run	0
Coverage (did run/can run)	100.00 %

Function listing

Color highlight code according to time

time	Calls	line	
0.04	1	3	tic
		4	
		5	%% change directory
< 0.01	1	6	cd('/home/eemaj/jborja/EE147_PROJECT')
		7	
		8	%% load data
61.38	1	9	load('data_new.mat')
		10	
		11	%Create the KERNEL
22.63	1	12	K_Kern = parallel.gpu.CUDAKernel('GlassKernel.ptx','GlassKernel.cu');
		13	
		14	%Specify the number of threads
< 0.01	1	15	K_Kern.ThreadBlockSize = [K_Kern.MaxThreadsPerBlock, 1, 1];
		16	
		17	%Specify the size fo the grid
< 0.01	1	18	GridsTotal = ceil(atoms/K_Kern.MaxThreadsPerBlock)+1; %number of grids which is 102
< 0.01	1	19	K_Kern.GridSize = [GridsTotal, 1];
		20	
0.14	1	21	h = figure;
0.63	1	22	obj = VideoWriter('GPU_3D_damage.avi');
< 0.01	1	23	open(obj);
		24	
< 0.01	1	25	for i = 300:500
		26	
		27	%returns the numbers of each column of damage
0.07	201	28	color = damage(:,i);
		29	

Time	Calls	Line	Code
		29	
		30	`    %Call GPU ArrAY`
0.17	201	31	`    G1 = gpuArray(single(color));`
0.03	201	32	`    G2 = feval(K_Kern,G1,atoms);`
0.07	201	33	`    color = double(gather(G2));`
		34	
561.96	201	35	`    scatter3(coordinate(:,1,i),coordinate(:,2,i),coordinate(:,3,i),color)`
0.04	201	36	`    daspect([1 1 1])`
0.07	201	37	`    view([70 50])`
< 0.01	201	38	`    pos_h = [0 0 1362 687]; % Adjusted to indidual user's PC`
0.02	201	39	`    set(h,'Position',pos_h)`
10402.75	201	40	`    currentFrame = getframe(h);`
		41	
5.58	201	42	`    writeVideo(obj,currentFrame);`
< 0.01	201	43	`    num = (i-300)/200 * 100;`
0.05	201	44	`    fprintf('%.2f%% Loaded\n',num)   %Display percent complete`
< 0.01	201	45	`end`
		46	
0.03	1	47	`close(obj);`
		48	
		49	`%Ends the stopwatch`
0.04	1	50	`toc`

getframe (Calls: 201, Time: 10402.723 s)

Generated 01-Jun-2018 20:51:15 using performance time.
function in file /usr/local/MATLAB/R2016b/toolbox/matlab/graphics/getframe.m
Copy to new window for comparing multiple runs

Refresh

☑ Show parent functions ☑ Show busy lines ☑ Show child functions
☑ Show Code Analyzer results ☑ Show file coverage ☑ Show function listing

Parents (calling functions)

Function Name	Function Type	Calls
GPU_Sort_Data	script	201

Lines where the most time was spent

Line Number	Code	Calls	Total Time	% Time	Time Plot
53	drawnow;	201	9791.043 s	94.1%	
111	x = alternateGetframe(parentFi...	201	585.242 s	5.6%	
54	drawnow;	201	26.398 s	0.3%	
56	parentFig = ancestor(h, 'figur...	201	0.019 s	0.0%	
42	if isa(h,'matlab.ui.control.UI...	201	0.006 s	0.0%	
All other lines			0.016 s	0.0%	
Totals			10402.723 s	100%	

Children (called functions)

Function Name	Function Type	Calls	Total Time	% Time	Time Plot
Scatter.doUpdate	function	201	6327.165 s	60.8%	
graphics/private/alternateGetframe	function	201	585.230 s	5.6%	
Scatter.getXYZDataExtents	function	201	7.568 s	0.1%	
Scatter.getColorAlphaDataExtents	function	201	0.047 s	0.0%	
Self time (built-ins, overhead, etc.)			3482.714 s	33.5%	
Totals			10402.723 s	100%	

Code Analyzer results
No Code Analyzer messages.

Coverage results
Show coverage for parent directory

Total lines in function	116
Non-code lines (comments, blank lines)	66
Code lines (lines that can run)	50
Code lines that did run	15
Code lines that did not run	35
Coverage (did run/can run)	30.00 %

Scatter.doUpdate (Calls: 201, Time: 6327.165 s)

Generated 01-Jun-2018 20:52:28 using performance time.
function in file /usr/local/MATLAB/R2016b/toolbox/matlab/specgraph/+matlab/+graphics/+chart/+primitive/@Scatter/doUpdate.p
Copy to new window for comparing multiple runs

This is a P-file for which there is no corresponding MATLAB code file

Refresh

☑ Show parent functions ☑ Show busy lines ☑ Show child functions
☑ Show Code Analyzer results ☑ Show file coverage ☑ Show function listing

Parents (calling functions)

Function Name	Function Type	Calls
getframe	function	201

Lines where the most time was spent
No MATLAB code to display

Children (called functions)

Function Name	Function Type	Calls	Total Time	% Time	Time Plot
Scatter.Scatter>Scatter.set.MarkerHandle	class method	201	20.371 s	0.3%	
isInvalidInLogScale	function	603	0.641 s	0.0%	
Scatter.cacheLegendIconColors	function	201	0.150 s	0.0%	
...catter>Scatter.get.MarkerFaceColor	class method	402	0.048 s	0.0%	
...catter>Scatter.get.MarkerEdgeColor	class method	402	0.034 s	0.0%	
Scatter.Scatter>Scatter.get.Marker	class method	201	0.018 s	0.0%	
Scatter.Scatter>Scatter.get.SizeData	class method	201	0.017 s	0.0%	
...catter>Scatter.get.MarkerFaceAlpha	class method	201	0.016 s	0.0%	
...catter>Scatter.get.MarkerEdgeAlpha	class method	201	0.014 s	0.0%	
Scatter.Scatter>Scatter.get.LineWidth	class method	201	0.014 s	0.0%	
Scatter.Scatter>Scatter.get.CData	class method	201	0.010 s	0.0%	
Scatter.Scatter>Scatter.get.BrushHandles	class method	529	0.007 s	0.0%	
Scatter.Scatter>Scatter.set.MarkerOrder	class method	201	0.006 s	0.0%	
Scatter.Scatter>Scatter.get.MarkerHandle	class method	312	0.006 s	0.0%	
...catter>Scatter.get.SelectionHandle	class method	201	0.006 s	0.0%	
Self time (built-ins, overhead, etc.)			6305.808 s	99.7%	
Totals			6327.165 s	100%	

Code Analyzer results
No MATLAB code to display

Coverage results
No MATLAB code to display

Function listing
No MATLAB code to display