

PARKER ANTHONY, Department of Computer Science, Mathematics, and Engineering, Shepherd University, Shepherdstown, WV, 25443.

Computing requirements have grown over the last few years, bringing with it the benefits of complex computing. However, this had led to a bottleneck within the system. Some of the more complex applications, like swarm modelers, need to be able to execute fast and as efficient as possible. Current CPUs slow the process down. The solution is GPU Computing. GPU computing is the latest adaptation of current computer systems to allow for the complex portions of code to be offloaded to the GPU, which has a high rate of parallelism. This allows for the code to be handled in tandem, executing faster. This brings it to the speed of the CPU, which handles the simpler portions of code. The idea of GPU computing is being used in all areas of computing. Whether it be art, medicine, or even society.