

# GPGPU Island Model Genetic Algorithms

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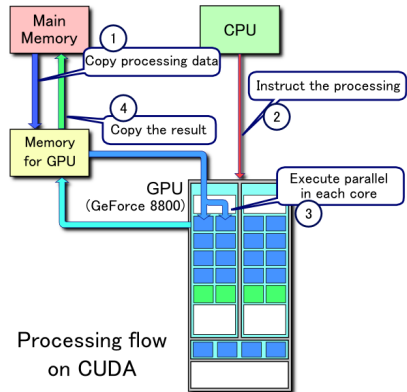
March 5, 2009

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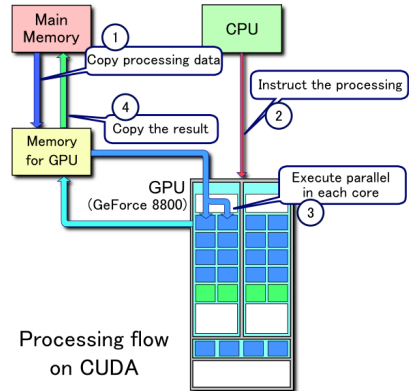
## Thesis Statment

The island model has been used in computing clusters to provide a speed up to genetic algorithm runtime. This proposal will implement a parallel genetic algorithm and determine if a GPGPU island model can provide a similar speed up, without the need for a cluster of computers and the overhead associated with them.

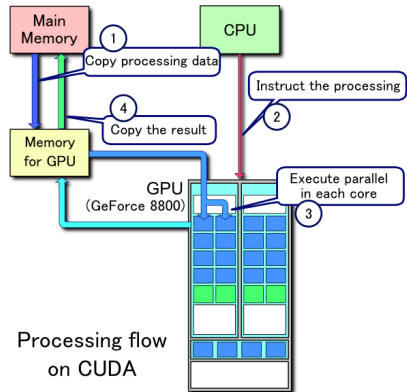
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- CUDA (Compute Unified Device Architecture)
- Allows the programs to utilize the large number of processors on the GPU = highly parallel



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- Mechanism to allow members of the population to "migrate"
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