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Finding exact hitting set solutions for systems biology applications using heterogeneous GPU clusters

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*Highlights

- The algorithm works for Hitting Set Problems (HSP) with thousands of variables.
- A preprocessing sorting procedure speedups the HSP algorithm 2.48 times.
- The GPU algorithm is up to 7.8 times faster than a parallel ten-core CPU version.
- The multi-GPU version load-balances the work among devices on heterogeneous GPUs.
- The algorithm on 8 GPUs runs 118.5 times faster than the original in a ten-core CPU.

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