Hashing optimization in graph algorithms

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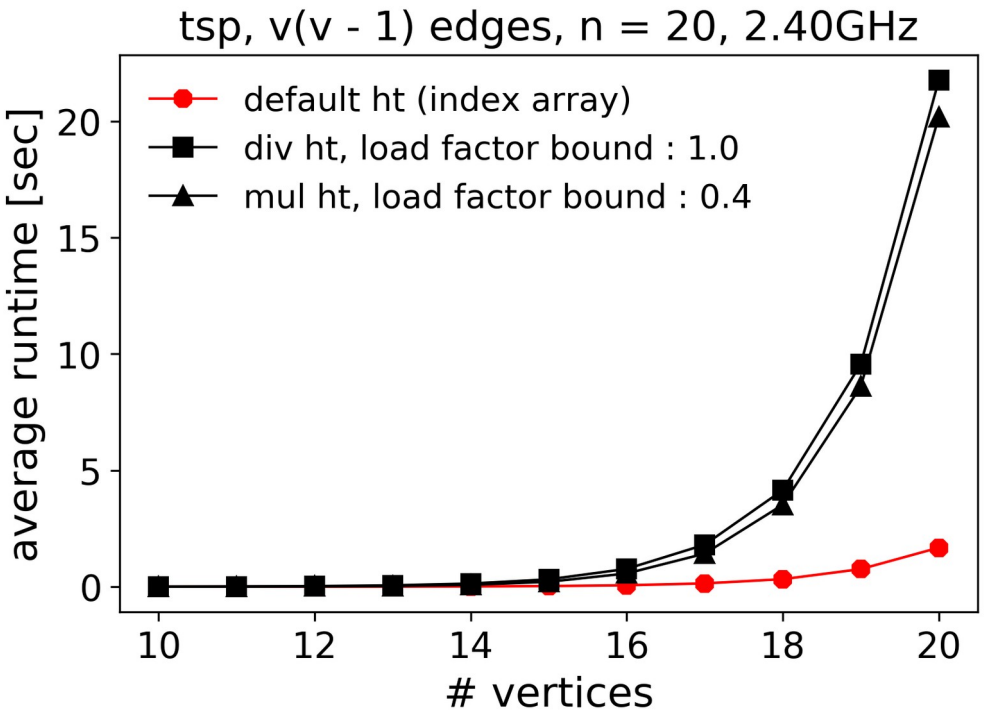
NP-hard problems:

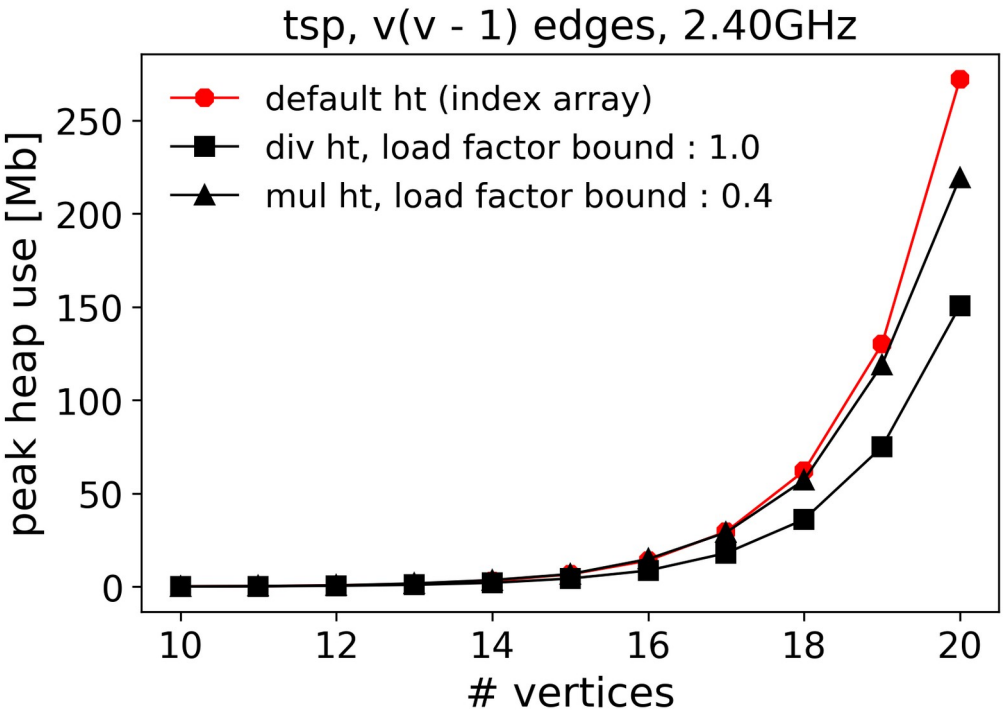
- often are/reduce to graph problems
- exact solutions of small instances are of interest
- exponential blow up often in memory

solution:

- hash table(s) as graph algorithm parameter(s)
- generics and portability across C89/90 and C99
- multithreading layer with pthread, when API is available (work in progress)

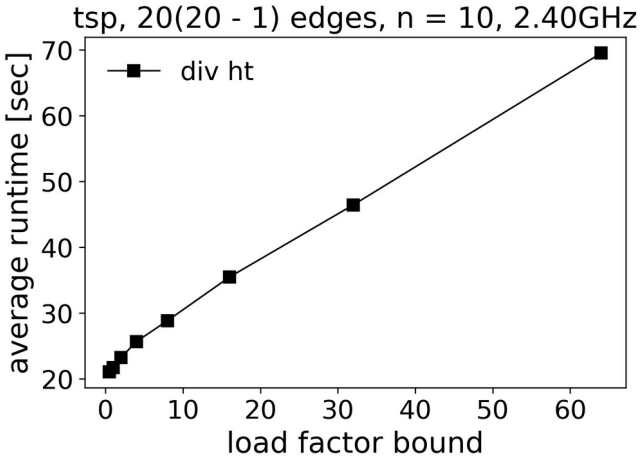
TSP: hashing vs. index array

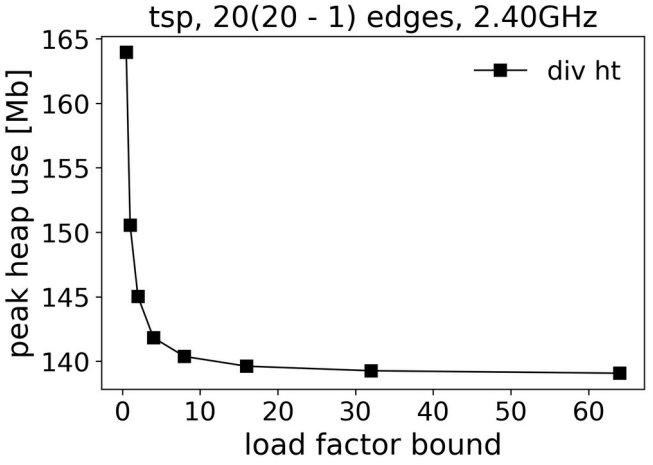




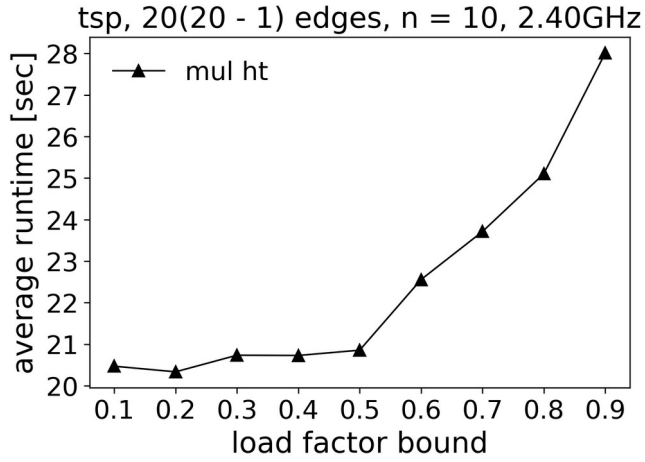
TSP: different space time trade-offs in hashing

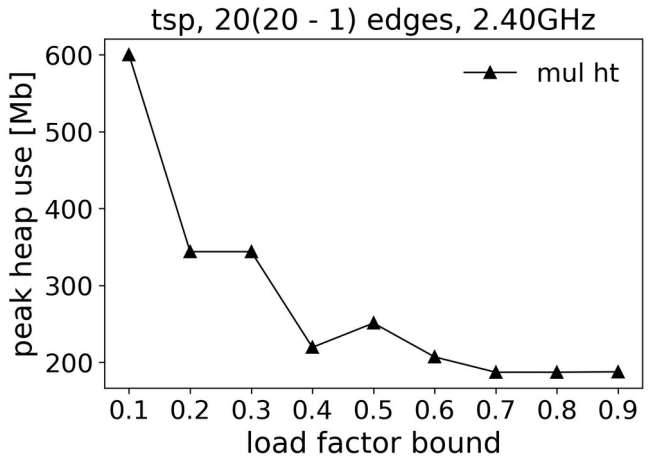
division and chaining



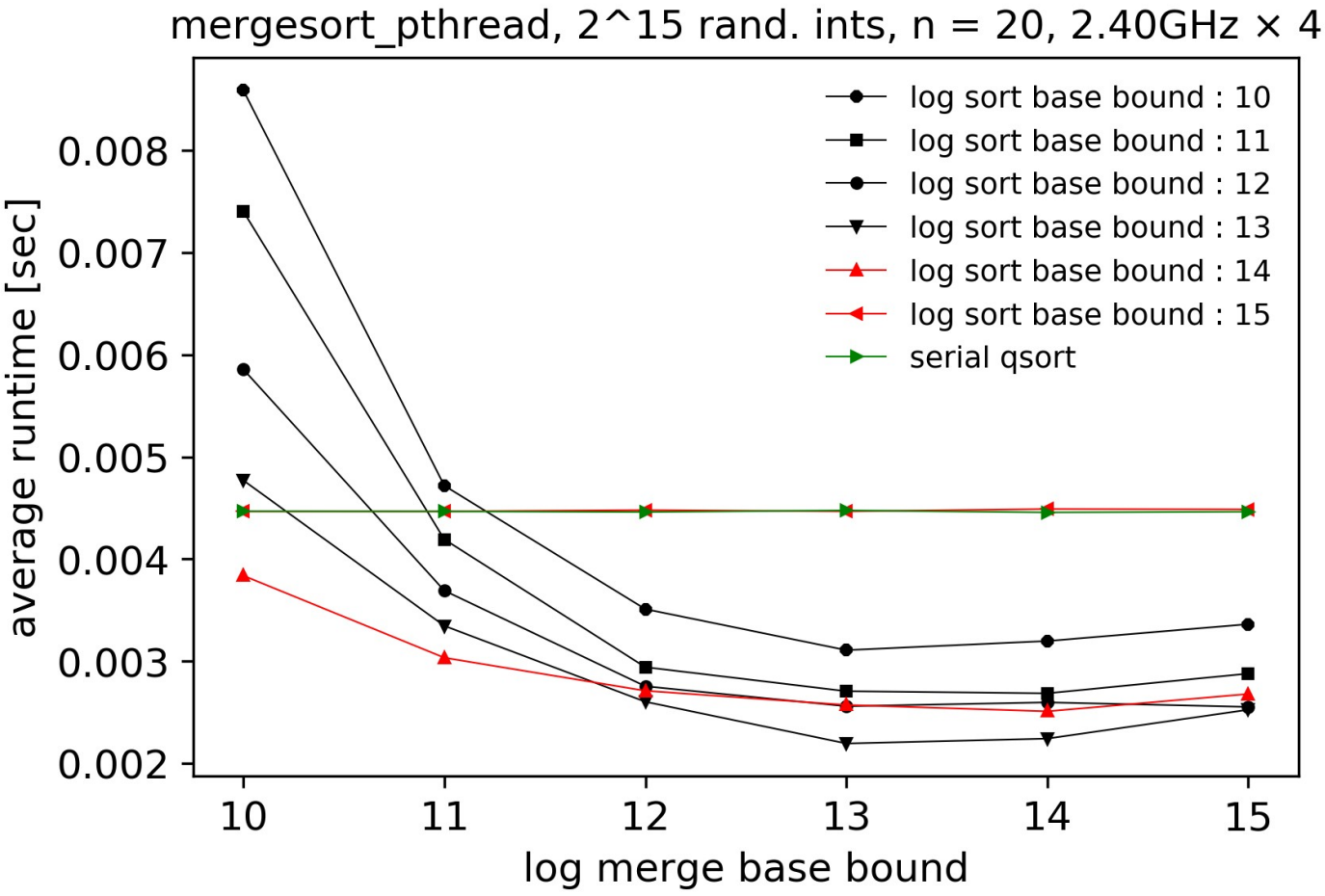


multiplication and open addressing with double hashing





Utilities: decoupling merge and sort parallelisms in mergesort



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