

CSC Seminar

SPEAKER

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TITLE

Using LIBRSB

ABSTRACT

Sparse BLAS operations like SpMV, SpMM, SpSM, SpMM are building blocks that can dominate the iterative solution process of sparse linear systems. LIBRSB is a portable performance library to provide such operations on shared-memory parallel CPUs. The talk will take the approach of presenting LIBRSB from a very practical perspective. After briefly introducing the defining concepts behind LIBRSB, it will continue with a tutorial-leaning overview of its capabilities. Practical performance-oriented considerations will expose the knobs to the most efficient usage. Succinct code listings will demistify mundane difficulties arising from the many options at hand. By giving a glance at LIBRSB's C/C++, Python and GNU/Octave Matlab-like APIs, this talk is also meant to identify related use cases by the community and stimulate a fruitful exchange.