



Efficient Linear Sketching

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- Ahle et al., '20 give a sketch  $S$  that can be applied to  $(A^{\otimes p})^T$  to obtain  $S(A^{\otimes p})^T$  in  $O(p \cdot \text{nnz}(A))$  time

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  - Properties of sketches that we need to solve a problem
  - Constructing sketches that can be applied quickly to the input



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# Coresets

- A weighted subset of points
  - Representative of the whole dataset for given problem
  - Usually constructed via importance sampling