

Our Results

- A streaming algorithm which can compute $\hat{x}[i]$ such that for $\alpha \leq 1$
 - Obtained by derandomizing [Minton and Price '14]
- The algorithm uses $O(tr \log(n) + \log^2 n)$ bits of space
 - $O(r \log n)$ update time

$$\Pr[|x[i] - \hat{x}[i]| > \frac{\alpha \|x\|_2}{\sqrt{t}}] \leq 2 \exp(-\alpha^2 r) + 1/\text{poly}(n)$$

Our Results

- A streaming algorithm which can compute $\hat{x}[i]$ such that for $\alpha \leq 1$

$$\Pr[|x[i] - \hat{x}[i]| > \alpha \frac{\|x\|_2}{\sqrt{t}}] \leq 2 \exp(-\alpha^2 r) + 1/\text{poly}(n)$$

- Obtained by derandomizing [Minton and Price '14]
- The algorithm uses $O(tr \log(n) + \log^2 n)$ bits of space
 - $O(r \log n)$ update time

Independent Sampling of Columns