COMPRESSED SENSING OF DATA WITH KNOWN DISTRIBUTION

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Compressed sensing is a technique with many important applications. For all these applications the most important parameter is the number of measurements required for perfect recovery. In this work we are able to drastically reduce the number of required measurements by incorporating information about the distribution of the data we wish to recover. Our algorithm works by minimizing an appropriately weighted ℓ^1 norm and our main contribution is the determination of good weights.

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