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(57) Abstract :

A system (100) and a method (200) for efficient sparse matrix processing is provided. The system (100) and method (200) for efficient sparse matrix processing significantly enhance computational efficiency, reduce memory overhead, and improve the performance of operations on sparse matrices. By leveraging advanced algorithms, optimized data structures, compressed storage formats, and parallel processing techniques, the system (100) offers a comprehensive solution for handling large-scale sparse matrices in diverse fields, including data analysis, machine learning, scientific computing, and numerical simulations. The system (100) unlocks the full potential of sparse matrices, enabling faster and more effective processing of complex datasets, ultimately leading to improved performance and scalability of numerous applications

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