

Final Project - Singular Value Decomposition in Image Compression

Math 214

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In linear algebra, Singular Value Decomposition (SVD) is a factorization of real or complex matrices, breaking down any matrix into its final and best factorization of $U\Sigma V^T$ (U is orthogonal, Σ is diagonal, and V is orthogonal). It is particularly useful in image processing, specifically image compression. In our project, we'll discuss how SVD is used in image processing along with some code and live examples to demonstrate.