

Diagram illustrating the SVD decomposition of matrix M into matrices U , Σ , and V .

The decomposition is shown as:

$$M = U \Sigma V^T$$

The components are represented by colored rectangles:

- M (Green rectangle)
- V (Red rectangle, with a lighter red shaded area on the right)
- Σ (Green rectangle, with a diagonal of green squares on a white background)
- U (Red rectangle)
- $U \Sigma$ (Gray rectangle, with a lighter gray shaded area on the right)