

Stańczyk and Matrix Decompositions

A Quick Taste of SVD, NMF, CUR

Course: Matrix Decompositions with R



Jan Matejko: *Stańczyk* (1862)

SVD — Singular Value Decomposition, Mathematically optimal... but still a bit dreamy.

SVD: $k = 4$



SVD: $k = 8$



SVD: $k = 16$



SVD: $k = 32$



CUR — Matrix Approximation, Fast and frugal... Stańczyk on a budget.

CUR: $k = 4$



CUR: $k = 8$



CUR: $k = 16$

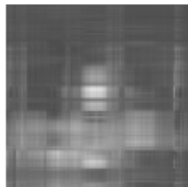


CUR: $k = 32$



NMF — Nonnegative Matrix Factorization, Pieces of the puzzle... Stańczyk in parts.

NMF: $k = 4$



NMF: $k = 8$



NMF: $k = 16$



NMF: $k = 32$



Coming to your R console soon!
Starring: **SVD**, **NMF**, **CUR**
in the role of data approximations.
Grab your keyboard and join the show!