

A 10x10 heatmap visualization of the MNIST dataset. The color scale ranges from dark purple (low intensity) to bright yellow (high intensity). The digits are clearly visible against the background, with the most prominent digit being a '0' in the center.

The heatmap visualizes the matrix A, which is 10000x10000. The x and y axes both range from 0 to 10000, with major ticks every 2000 units. The matrix is predominantly dark blue, representing zero values. Four yellow squares indicate non-zero entries: one at (0, 0), one at (0, 1000), one at (0, 7500), and one at (7500, 0).