

Figure 1: A 10x10 heatmap visualization of the matrix  $A$ . The color scale ranges from -1.0 (dark blue) to 1.0 (dark red), with 0.0 being a light beige. The matrix is sparse, with non-zero values concentrated along the main diagonal and a few off-diagonal elements. The diagonal elements are all 1.0. The off-diagonal elements are -1.4, -1, and 0. The matrix is symmetric.