Projection matrix

The projection matrix that we obtain for projecting the problem instances as points in a 9D feature space to a 2D instance space with axes z_1 and z_2 is as follows:

$$\begin{bmatrix} z_1 \\ z_2 \end{bmatrix} = \begin{bmatrix} 0.2899 & -0.2316 \\ 0.2924 & -0.2034 \\ -0.3407 & -0.2515 \\ 0.1679 & -0.5357 \\ 0.2802 & -0.3762 \\ -0.0796 & -0.5672 \\ 0.4686 & 0.6227 \\ 0.3397 & -0.3426 \\ -0.5083 & 0.0148 \end{bmatrix}^T \begin{bmatrix} t_1 \\ t_2 \\ t_3 \\ f \\ \mathbf{x} \in X \text{totalWeight}(\mathbf{x}) \\ \text{First Weight} \\ \text{Smaller Better Pairs} \\ \text{Reduced Maximum Cardinality} \\ \text{Reduced Polyfit Linear} \end{bmatrix}$$