

$$J(\mathbf{x}) = |\mathbf{B} - \mathbf{A}\mathbf{x}|^2 + \mathbf{x}^T (u_1^2 \mathbf{H}_1 + u_2^2 \mathbf{H}_2 + u_3^2 \mathbf{H}_3) \mathbf{x}$$