



Quadratic Forms

1 Why

2 Definition

2.1 Notation

Let $A \in \mathbf{R}^{d \times d}$. Let $x \in \mathbf{R}^d$. Then $x^T A x$ is a quadratic form.

$$x^T A x = \sum_{i,j} A_{ij} x_i x_j$$