$$y_i = (a_i)^T x + w_i$$

$$\hat{x} = (\sum_i a_i (a_i)^T)^{-1} \sum_i y_i a_i$$

where

- $a_i \in \mathbb{R}^{n \times 1}$  :the measurement vectors
- $w_i \in \mathbb{R}$  :measurement noise
- $x \in \mathbb{R}^n$  :measurement noise