$$y_i = {a_i}^T x + w_i$$

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

where

$a_i \in \mathbb{R}^m$ the measurement vectors
$w_i \in \mathbb{R}$ measurement noise
$x \in \mathbb{R}^m$ original vector