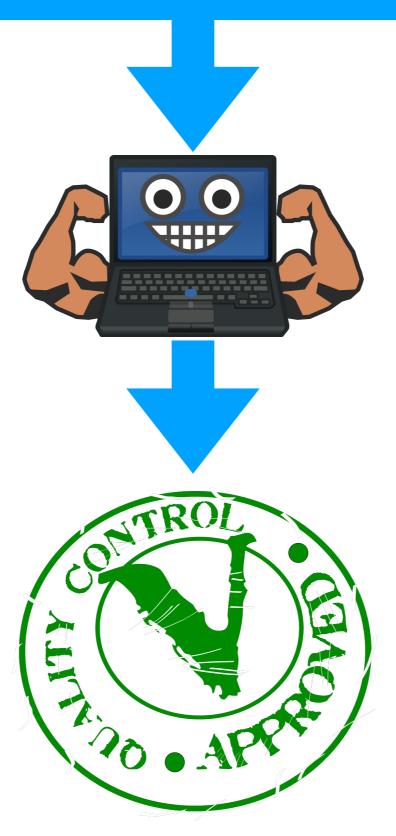
Regularization

Training Data

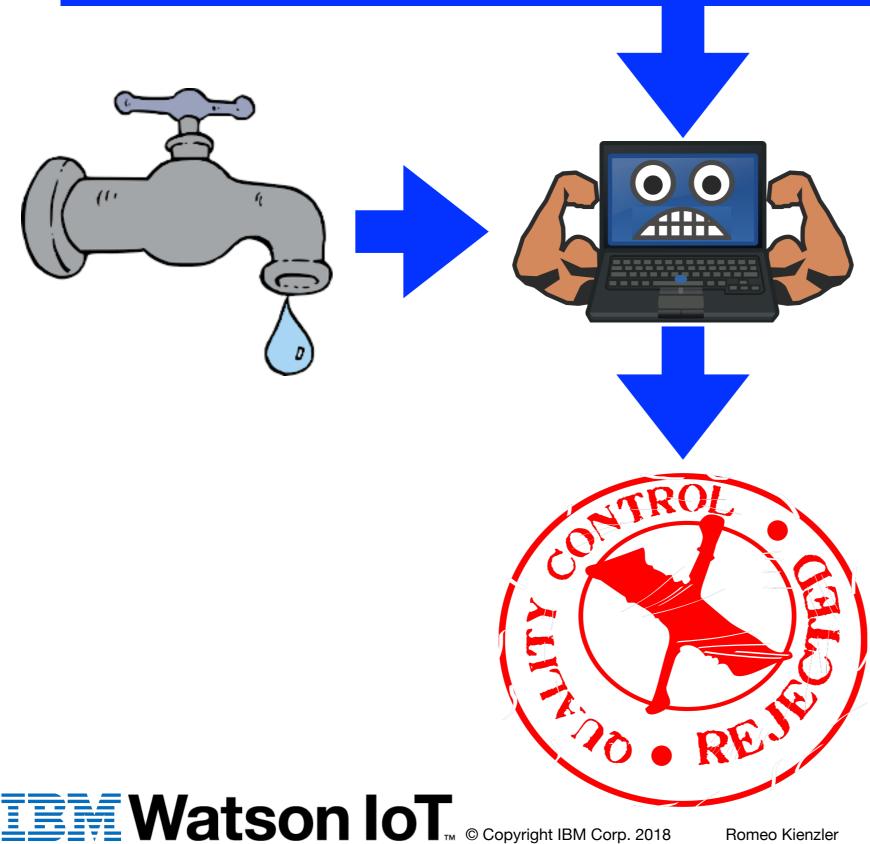
Training Data



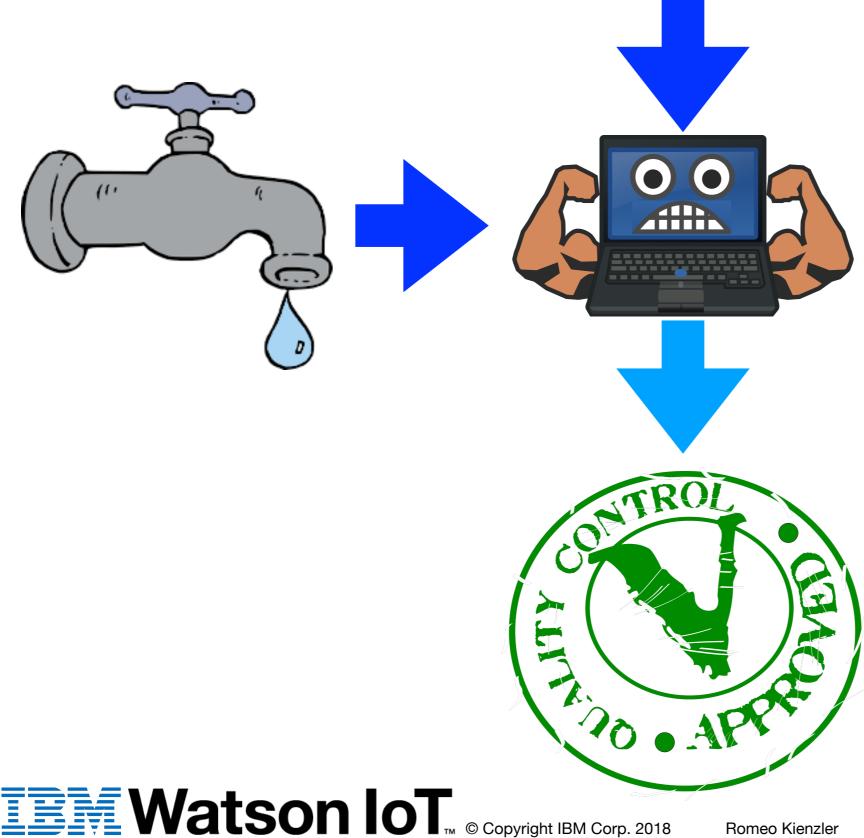
Unseen Data



Unseen Data



Unseen Data

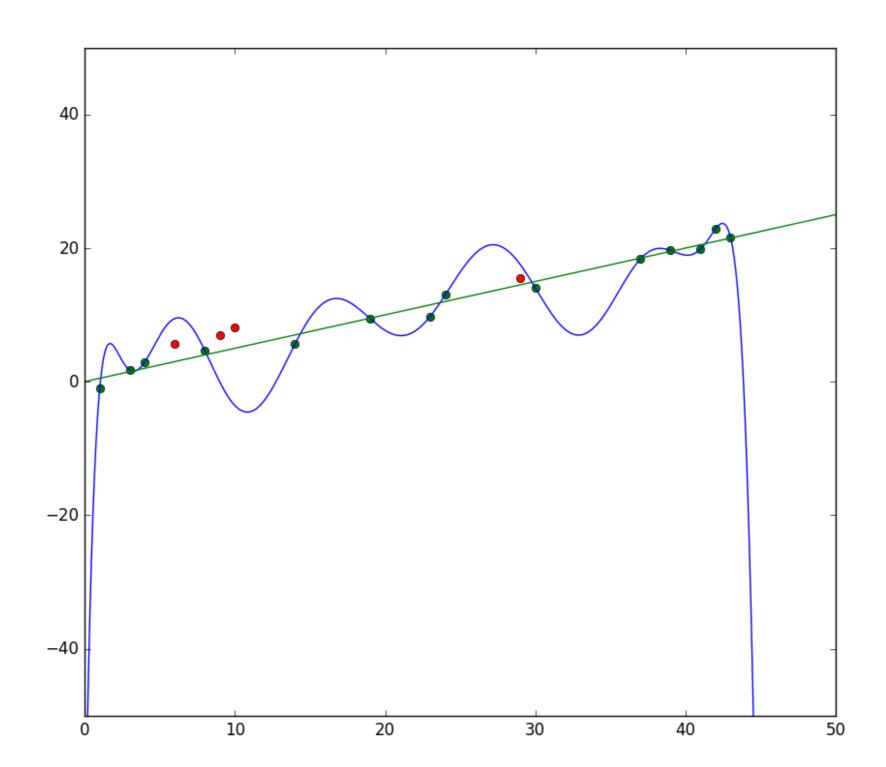


$$\sum_{i=1}^{n} (Y_i - \sum_{j=1}^{p} X_{ij} \beta_j)^2$$

$$\sum_{i=1}^{n} (Y_i - \sum_{j=1}^{p} X_{ij} \beta_j)^2$$

$$\sum_{i=1}^{n} (Y_i) - \sum_{j=1}^{p} X_{ij} \beta_j)^2$$

$$\sum_{i=1}^{n} (Y_i - \sum_{j=1}^{p} X_{ij} \beta_j)^2$$



$$\sum_{i=1}^{n} (Y_i - \sum_{j=1}^{p} X_{ij} \beta_j)^2 + \lambda \sum_{j=1}^{p} |\beta_j|)$$

$$\sum_{i=1}^{n} (Y_i - \sum_{j=1}^{p} X_{ij} \beta_j)^2 + \lambda \sum_{j=1}^{p} |\beta_j|$$

$$\sum_{i=1}^{n} (Y_i - \sum_{j=1}^{p} X_{ij} \beta_j)^2 + \lambda \sum_{j=1}^{p} |\beta_j|)$$

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$$\sum_{i=1}^{n} (Y_i - \sum_{j=1}^{p} X_{ij} \beta_j)^2 + \lambda \sum_{j=1}^{p} \beta_j^2$$

$$\sum_{i=1}^{n} (Y_i - \sum_{j=1}^{p} X_{ij} \beta_j)^2 + \lambda \sum_{j=1}^{p} \beta_j^2$$

Summary