Machine Learning

SUPERVISED LEARNING

Feature = Independet Variable = Variable Bebas = x = Kolom selain Label = materi

Rumah: kamar, kamar mandi, mobil, luas tanah

Label = Dependent Variable = Variable Terikat = y = Jawaban Ujian

Rumah: Harga Rumah

* Regresi
  + Untuk memprediksi sebuah continuous value
  + Continous value itu contoh
    - Harga Rumah: 1,250,000 ; 550,000 ; 435,000
    - 1,000,000 – 2,000,000: 1,535,254.0987865999999999999999999
    - 1-2: 1.5654728999999999
  + Model Machine Learning
    - LinearRegresi (y = bx + a)
      * Model.fit(df[[‘penumpang’]], df[‘harga’])
      * Df[‘prediction’] = Model.predict(df[[‘penumpang’]])
      * MSE = Mean\_squared\_error(df[‘harga’], df[‘prediction’])
      * MSE = 3
      * Prediksi ala LinearRegresi / Jawaban
        + MAE (lr)
        + MSE (lr)
        + RMSE (lr)
        + R2 Score (lr)
    - Ridge (SSE.OLS + lambda (alpha) x sum(b^2))
      * Prediksi ala Ridge / Jawaban
      * MAE (rid)
      * MSE (rid)
      * RMSE (rid)
      * R2 Score (rid)
    - Lasso (SSE.OLS + lambda (alpha) x sum(|b|))
      * MAE (las)
      * MSE (las)
      * RMSE (las)
      * R2 Score (las)
    - ElasticNet
    - Polynomial Regression
    - DecisionTreeRegressor
    - RandomForestRegressor
    - GradientBoostRegressor
  + Evaluation Metrics (Regresi):
    - MAE (Mean Absolute Error) < bagus
    - MSE (Mean Squared Error) < bagus
    - RMSE (Root Mean Squared Error) < bagus
    - R2 Score > bagus
* Klasifikasi
* Klustering

Andi (cara belajar A)

* Nilai Modul
  + Modul 1 + Modul 2 + Modul 3 / 3 \*40%
* Nilai Final Project
  + Final Project \* 50%
* Nilai Logic Test
  + Logic Test \* 10%
* Nilai Akhir > 80
  + Nilai Modul + Nilai Final Project + Nilai Logic Test

Andi prediksi/jawaban – kunci jawaban untuk melakukan penilaian

Budi (cara belajar B)

* Nilai Modul
  + Modul 1 + Modul 2 + Modul 3 / 3 \*40%
* Nilai Final Project
  + Final Project \* 50%
* Nilai Logic Test
  + Logic Test \* 10%
* Nilai Akhir > 80
  + Nilai Modul + Nilai Final Project + Nilai Logic Test

Budi prediksi/jawaban – Kunci jawaban untuk melakukan penilaian

Korelasi

Threshold

Correlation Poin >= +0.75

Correlation Poin <= -0.75

Correlation Poin itu

+/- itu menunjukkan apakah korelasinya positif atau negative

Angka itu menunjukkan seberapa signifikan

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