



TECNOLÓGICO NACIONAL DE MÉXICO INSTITUTO TECNOLÓGICO DE TIJUANA SUBDIRECCIÓN ACADÉMICA DEPARTAMENTO DE SISTEMAS Y COMPUTACIÓN

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CARRERA:

Ingeniería en Sistemas Computacionales

MATERIA:

Datos Masivos

TÍTULO:

Practica-Linear Support Vector Machine

UNIDAD A EVALUAR:

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Linear Support VectorMachine

We import the "LinearSVC" library, this binary classifier optimizes the hinge loss using the OWLQN optimizer

```
import org.apache.spark.ml.classification.LinearSVC
```

We import and create the session in Spark

```
import org.apache.spark.sql.SparkSession
val spark =
SparkSession.builder.appName("LinearSVCExample").getOrCreate()
```

We load the training data.

```
val training =
spark.read.format("libsvm").load("/Archivos/sample_libsvm_data.txt
")
```

We set the maximum number of iterations and the regularization parameter

```
val lsvc = new LinearSVC().setMaxIter(10).setRegParam(0.1)
```

We make an adjustment on the model

```
val lsvcModel = lsvc.fit(training)
```

We print the coefficients and intercepts for the linear SVC

```
println(s"Coefficients: ${lsvcModel.coefficients} Intercept:
${lsvcModel.intercept}")
```