Inheritance

Classifier

+ *trainOrientation(string):void*
+ *predictOrientation (double, double, double): void*
+ *predictOrientation (string): void*

Data

- x: Double
- y: Double
- z: Double
- o: Int

+ Data()
+ Data(Data &)
+ Data(x: Double, y: Double, z: Double, o: Int)
+ getX(): Double
+ getY(): Double
+ getZ(): Double
+ getO(): Int
+ setX(x: Double): void
+ setY(y: Double): void
+ setZ(z: Double): void
+ setO(o: Double): void
+ getDistanceFrom(Data): Double
+ getOrientation(): string
+ operator = (Data): Data

DummyClassifier

+ trainOrientation(fileName: String):void
+ predictOrientation (x: Double, y: Double, Double): void
+ predictOrientation (fileName: String): void

KNNClassifier

+ trainOrientation(fileName: String):void
+ predictOrientation (x: Double, y: Double, z: Double): void
+ predictOrientation (fileName: String): void

NNClassifier

- dataPoints: Data []
- testingPoints: Data []

+ trainOrientation(String):void
+ predictOrientation (Double, Double, Double): void
+ predictOrientation (String): void
+ testingOrientation(String): void
+ nearestNeighbour(Data): Data&