ThReshold selection for one-class classifiers.

Knecmab

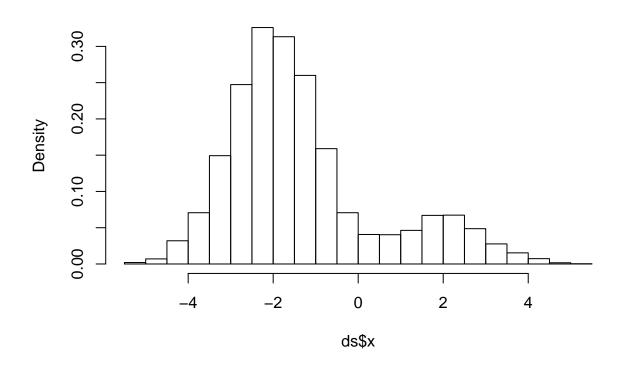
Tuesday, November 18, 2014

ThReshold selection

First lets load the package and get a data set.

```
require(threshold)
ds <- twoGaussians(seed=123)
hist(ds$x, breaks='Scott', freq=FALSE)</pre>
```

Histogram of ds\$x

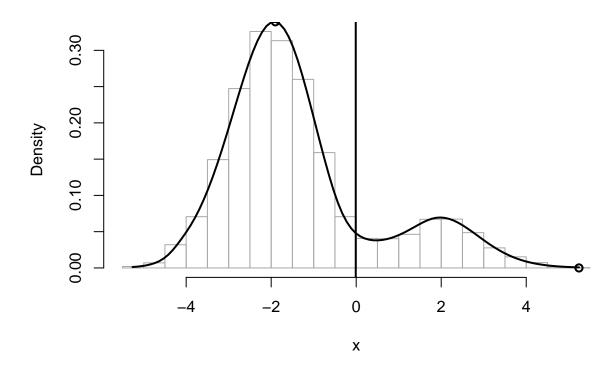


And see what the different threshold selection methods do. rosin threshold:

```
th_rosin <- find_threshold(ds$x, method="rosin")
th_rosin</pre>
```

```
## [1] "Threshold(s): -0.0105547"
## [1] "Method: rosin"
```

Method: rosin



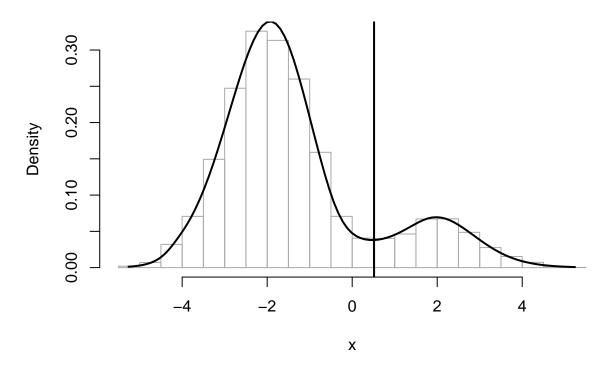
valleys threshold:

```
th_valleys <- find_threshold(ds$x, method="valleys")
th_valleys</pre>
```

```
## [1] "Threshold(s): 0.514605"
## [1] "Method: valleys"
```

plot(th_valleys)

Method: valleys



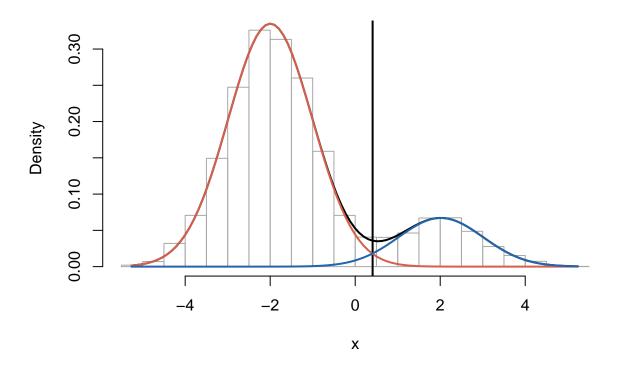
 ${\tt nmm}$ threshold:

```
th_nmm <- find_threshold(ds$x, method="nmm")
th_nmm

## [1] "Threshold(s): 0.409573"
## [1] "Method: nmm"

plot(th_nmm)</pre>
```

Method: nmm



entropy threshold:

```
th_entropy <- find_threshold(ds$x, method="entropy")
th_entropy

## [1] "Threshold(s): -0.35"
## [1] "Method: entropy"

plot(th_entropy)</pre>
```

Method: entropy

