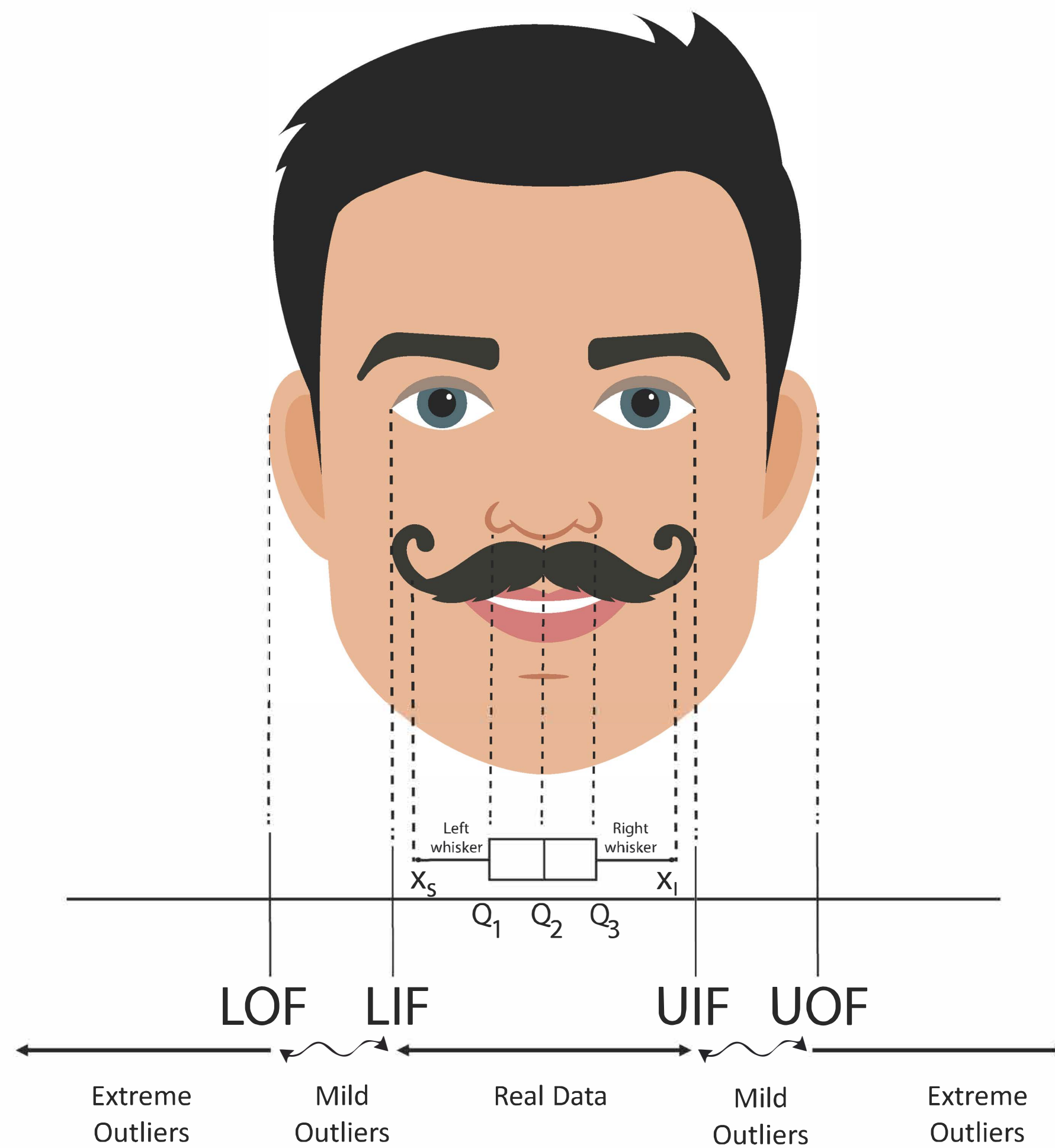


# BOX-PLOT Versus HUMAN-FACE



## Notations:

$Q_2$ : Median - Apex of the Nose

$Q_1$ : First Quartile - Left ala of the Nose

$Q_3$ : Third Quartile - Right ala of the Nose

LIF - Lower Inner Fence - Left corner of the left side Eye

UIF - Upper Inner Fence - Right corner of the right side Eye

$X_s$ : Smallest data value between the LIF and the UIF = Dali of the left side Whisker/Moustache

$X_i$ : Largest data value between the LIF and the UIF = Dali of the right side Whisker/Moustache

LOF - Lower Outer Fence - Left edge of the left side Ear

UOF - Upper Outer Fence - Right edge of the right side Ear

## Explanation:

- **Real Data:** Data between the LIF and the UIF = Data observed by both Eyes

- **Mild-Outliers:** Data either between LIF and LOF or between UIF and UOF

- Not observed, but heard

- Data between Eyes and Ears

**Note:** A mild outlier could be a part of real data set. Must verify before discarding it.

- **Extreme Outliers:** Data below LOF or above UOF

- Never heard something

**Note:** Extreme outliers, in general, are not a part of data set.

$Q_2 - Q_1$  = Length of left side box = Size of left Nostril

$Q_3 - Q_2$  = Length of right side box = Size of right Nostril

**Note:** If the size of left Nostril is same as that of the right Nostril, the human face is symmetric and looks beautiful. Otherwise, it will look ugly being either skewed to the right or skewed to the left.

$Q_1 - X_s$  = Length of the left side Whisker/Moustache

$X_i - Q_3$  = Length of the right side Whisker/Moustache

**Note:** If the length of the left side whisker/moustache is same as that of right side whisker/moustache, the human face looks attractive and powerful.

Designed by:

Sarjinder Singh

Dept of Mathematics

Texas A&M University Kingsville

Kingsville TX 78363 - USA