

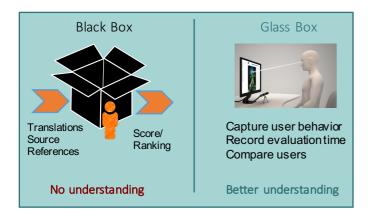
# iAppraise: A Manual Machine Translation Evaluation Environment Supporting Eye-tracking

**جامعـة حمـدبـن خليفـة** HAMAD BIN KHALIFA UNIVERSITY

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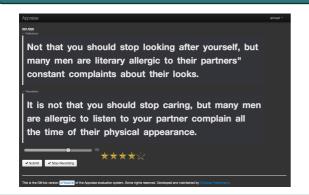
## Background

Evaluating MT is hard! Human evaluation is the most reliable method Evaluations are highly subjective Evaluation process is not well understood



Eye-mind theory: "people cognitively process objects that are in front of their eyes" (Just and Carpenter, 1980)

### User Interface



### iAppraise Data

pscore	Gazing precision, the number of hits for a sample of words selected
hscore	Task human score
score	Score given by the user
scaling	The ratio of the (vertical) size of one physical pixel on the current display to the size of one device independent pixels(dips)
region	Active region where the gaze landed
isViewed	Status of the region if it is being taracked or not.
zoom	Window zooming leve.
scrollx	Number of horizontal pixels the current document has been scrolled from the upper left comer of the window
scrolly	Number of vertical pixels the current document has been scrolled from the upper left comer of the window
clientWidth	Window width
div0Height	Window height
innerHeight	The inner height of the browser window
gazex	Actual coordinate x of the gaze
gazey	Actual coordinate y of the gaze
outerHeight	The outer height of the browser window
data	JSON EyeTribe message3

### iAppraise

Brings low cost eyetracking to Appraise (Federmann, 2012)

### Features:

- ✓ Works with low cost eye tracker eyeTribe
- ✓ Brings simplified user interface ready for eyetracking
- ✓ Allows you to visualize user's gaze behavior via replay
- ✓ Includes visualization and analysis tools (iAppraise Analysis)
- ✓ Easily extended to tasks beyond MT Eval
- ✓ Open source!

# iAppraise Analysis iAppraise Model Appraise iAppraise UI Port 8080 iAppraise Adapter Network TCP 6555 EyeTribe Server EyeTribe Tracker

