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The Salient360! Toolbox: Processing, Visualising and Comparing Gaze Data in 3D

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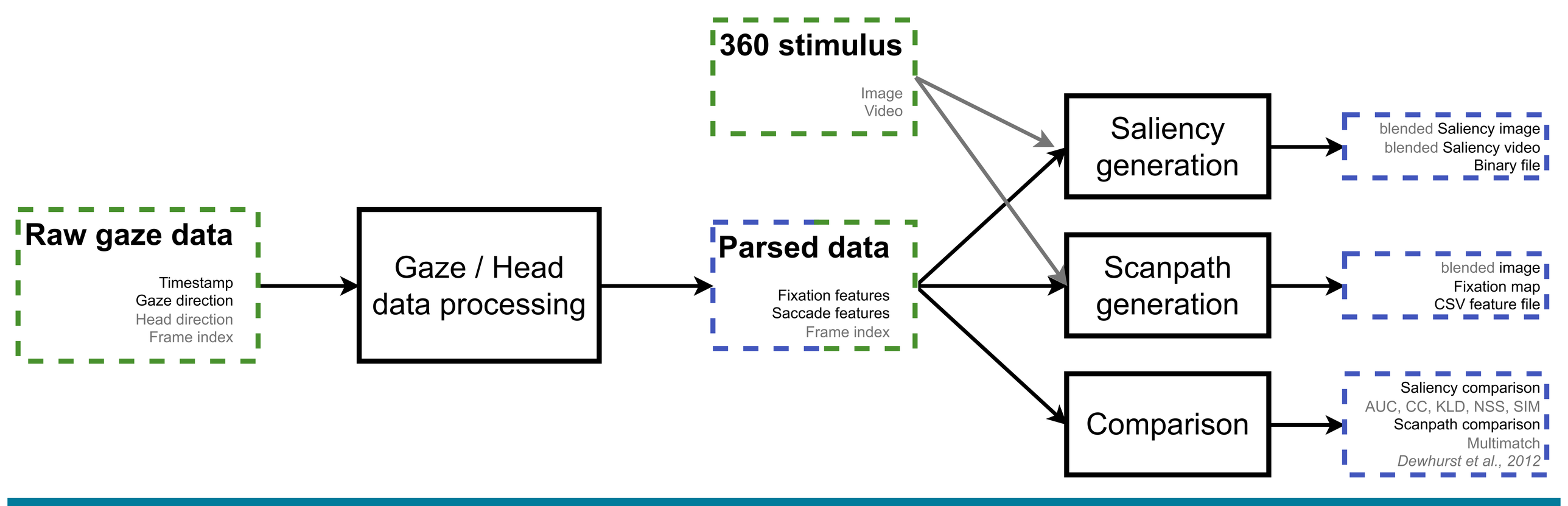


The *Salient360!* Toolbox **handles gaze data in 3D** (XR): Process, Compare, Generate, and Visualise your data.

github.com/David-Ef/salient360Toolbox

Inputs

Time stamp gaze direction and head rotation
➔*Raw gaze file*

List of paired longitudes and latitudes
➔*Fixation file*

Gaze features

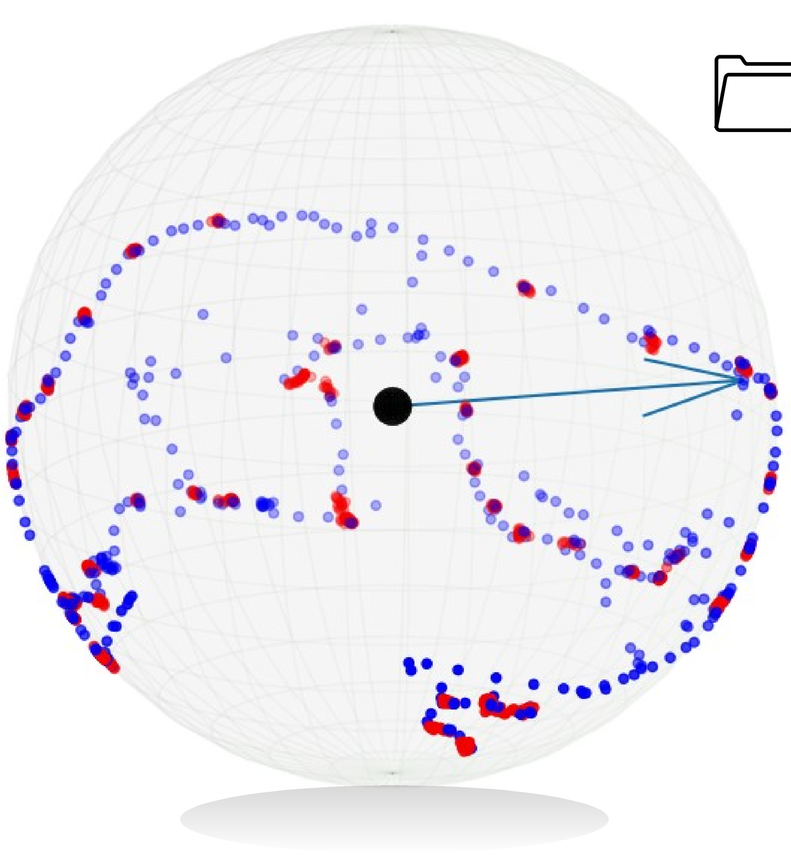
Fixation position, duration, peak velocity

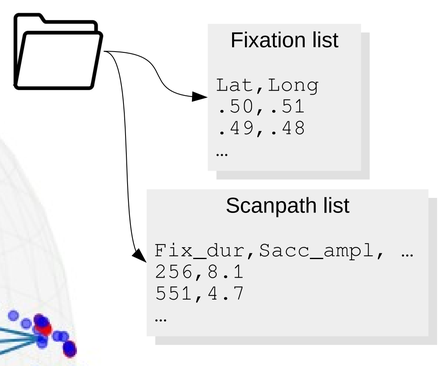
Saccade amplitude, relative and absolute directions

Dynamic content

Generate video saliency maps

Compare data temporally





Parse and generate

Parse with I-VT, I-HMM, I-CT and customisable parameters

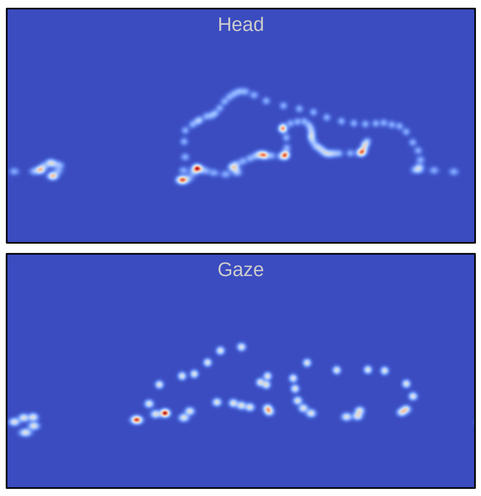
Generate *gaze features* (e.g., saccade direction), *fixation list*, *saliency map*, *fixation map*

Accelerated with NumPy and Numba

Consider head data alone

Parse as head trajectory
(head rotation centroid during time-window)

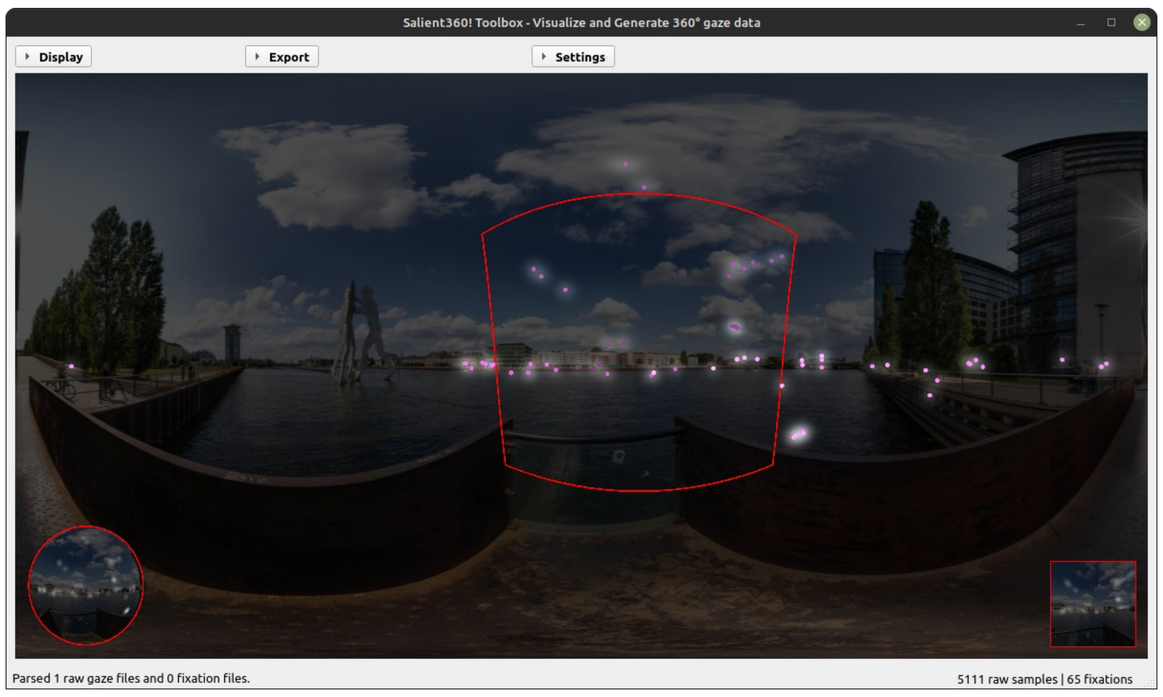
Generate and compare with the same methods as gaze data.



Usages

Automate and mass process with the **command-line** or **scripting** interface (*Python*)

Explore your data and fine-tune gaze parsing with the **GUI**



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