

MaggotTracker

Drosophila melanogaster larval locomotion

User manual for MaggotTracker software components.

MagViewer.

I. Overview

MagViewer plays one video together with visualization of a few locomotive parameters.

II. Installation

Download MagViewer ([downloads](#)).

Simply unzip the ZIP file. The Java programs are compiled already.

III. Input files

The input is one video (.avi extension) that were already processed by MagRecognizer.

IV. Running the software

MagViewer runs only on *Windows* systems:

- Double click on MagViewer.bat
Or, make a "windows shortcut" to such file.
- Go to the File menu, click Open to choose a video file. Then click Play.
(Clicking Play directly will first allow to choose a video and then plays it immediately).
- By default, the display of stride information is ON (Options menu)
- The option of displaying Head angle can be set to ON using the Options menu
- The option of displaying Body angle can be set to ON using the Options menu
- The video controls allow for pausing and resuming the playing of the video.
(The other video controls are not implemented).
- The application was designed to run one video only. It is recommended to close it and re-start MagViewer before playing another video.

V. Result file

A single plain-text tab-separated file named details.txt is created with a header line listing a subset of the locomotion parameter, and one line of each parameter value for each frame in the video.

The parameters listed in details.txt are:

- Timestamp (seconds)
- Length
- Stride (value of zero means not striding)
- Speed (for points 1 to 13)
- X, Y coordinates (for points 1 to 13)

VI. Additional notes

In our setup we found that Java version 1.7 may be needed to run MagViewer.

If MagViewer does not work or it shows an error when playing the video, try updating to Java 1.7, or making sure that it is in the path, or explicitly running java from a Java 1.7 directory. This can be done by changing the word "@java" inside of MagViewer.bat to ""C:\Program Files (x86)\Java\jre7\bin\java" (assuming that such folder contains Java 1.7).