aipose

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aipose is a Python library for use pose estimator easyli in your python project in order to do this.

Check out the *Usage* section for further information, including how to *Installation* the project.

Note: This project is under active development.

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1.1 Usage

1.1.1 Installation

To use `aipose`, first install it using pip:

```
(.venv) $ pip install aipose
```

you can install aipose from its source code.

```
git clone https://github.com/Tlaloc-Es/aipose.git
cd aipose
pip install -e .
```

1.1.2 Run demo

Use the following command to run a demo with your cam and YOLOv7 pose estimator,

```
posewebcam
```

1.2 YOLO V7 Pose Model

1.3 Frame Manager

The Video Stream library uses OpenCV to read from various sources of video such as webcams, videos, or RTSP streams.

An example of the implementation can be found here

1.3.1 Video Stream Lifecycle

To perform actions with a pose estimator, you need to build or call a FrameManagerBase.

When a video is being processed, there are three events that can be managed using a FrameManagerBase:

- **stream_started**: This event is triggered when the video stream starts.

- **before_read_frame**: This event is triggered before a frame is read from the video stream.

- **frame_received**: This event is triggered for each frame read from the video stream.

- **stream_ended**: This event is triggered when the video stream ends.

You can use these events to perform various actions such as initializing variables, preprocessing the frame, running inference, and displaying the result.