

Rock, paper, scissors

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WebKit: a tensor API on the track

```
videoTrack.tensorConfiguration = {  
  model_path, inputWidth: width, inputHeight: height,  
  accelerator_conf  
};  
videoTrack.addEventListener('tensordata', e =>  
  extractHandGestureFromTensors(e.tensors));
```

- Two new members on `MediaStreamTrack`
- `tensordata` carries a JS data array

libcamera

- Pi 5 camera official module
- through `pipewiresrc`
- Patched libcamera for the Pi 5

GStreamer + NNStreamer

- Inference *inside* the MediaStream capture pipeline

```
tee (MediaStream) →  
    tensor_converter → tensor_transform → tensor_filter →  
    tensor_sink
```

Let's play!

[Private] Rock Paper Scissors · Igalia Multimedia Demo

http://127.0.0.1:8000/rock-paper-scissors.html

igalia MULTIMEDIA · BROWSERS
Rock · Paper · Scissors

LIVE DEMO

ENGINE WPE WebKit CAPTURE libcamera PIPELINE GStreamer

CAMERA • Integrated_Webcam_HD: Integrate • USB Live camera: USB Live cam

Tensor: 31 events/s · Accelerator: true:gpu,!cpu,npu

YOU PLAYER Live capture LIBCAMERA · 1:1



YOU 1

VS

CPU 0

TIES 0

RESTART

CPU OPPONENT Random throw ROUND 01

YOU WIN



Thanks!

