

1. Install ffmpeg (and optionally gifsicle) —> in terminal:

```
brew install ffmpeg gifsicle
```

2. Go to folder where video is located

```
cd /path/to/your/video/folder
```

3. Make the GIF with the 2-step palette method, and in terminal:

```
# create a palette for good colors
```

```
ffmpeg -y -i demo.mp4 -vf "fps=12,scale=800:-1:flags=lanczos,palettegen" palette.png
```

```
# use that palette to produce a clean GIF
```

```
ffmpeg -i demo.mp4 -i palette.png -lavfi "fps=12,scale=800:-1:flags=lanczos [x]; [x][1:v] paletteuse=dither=bayer:bayer_scale=5" demo.gif
```

4. (Optional) If too large, lower FPS or width a bit

```
ffmpeg -i demo.mp4 -filter_complex \
"[0:v]fps=10,scale=640:-1:flags=lanczos,split[s0][s1];[s0]palettegen[p];[s1]
[p]paletteuse=dither=bayer:bayer_scale=3" \
-loop 0 demo.gif
```

4. (optional) Trim duration if the loop is long

```
ffmpeg -ss 0 -to 4 -i demo.mp4 -filter_complex \
"[0:v]fps=10,scale=640:-1:flags=lanczos,split[s0][s1];[s0]palettegen[p];[s1]
[p]paletteuse=dither=bayer:bayer_scale=3" \
-loop 0 demo_short.gif
```

5. Optimize with gifsicle

```
gifsicle -O3 --lossy=40 demo.gif -o demo_optimized.gif
```

6. Finally, in Github Readme:

```
<p align="center">
  
  <br>
  <em>Interactive electrode visualization example</em>
</p>
```