```
import React, { useState, useRef } from 'react';
import * as tf from '@tensorflow/tfjs';
import * as handTrack from 'handtrackjs';
import { Canvas } from '@react-three/fiber';
import { OrbitControls } from '@react-three/drei';
import { Text } from '@react-three/drei';

const AIMagicPen = () => {
 const [text, setText] = useState('');
 const videoRef = useRef(null);
 const canvasRef = useRef(null);
 const modelRef = useRef(null);

 const loadModel = async () => {
  modelRef.current = await handTrack.load();
  handTrack.startVideo(videoRef.current).then(status => {
   if (status) {
    runDetection();
   }
  });
 };

 const runDetection = async () => {
  if (modelRef.current) {
   const predictions = await modelRef.current.detect(videoRef.current);
   drawCanvas(predictions);
```

```
    requestAnimationFrame(runDetection);
   }
  };

  const drawCanvas = (predictions) => {
   const ctx = canvasRef.current.getContext('2d');
   ctx.clearRect(0, 0, ctx.canvas.width, ctx.canvas.height);
   predictions.forEach(pred => {
    ctx.strokeStyle = 'red';
    ctx.lineWidth = 2;
    ctx.strokeRect(pred.bbox[0], pred.bbox[1], pred.bbox[2], pred.bbox[3]);
    setText('AI Detected: ' + pred.label);
   });
  };

  return (
   <div className="flex flex-col items-center justify-center h-screen bg-gray-900 text-white">
    <h1 className="text-2xl font-bold mb-4">AI Magic Pen</h1>
    <video ref={videoRef} width="640" height="480" autoPlay className="border-2 border-blue-500" />
    <canvas ref={canvasRef} width="640" height="480" className="absolute top-0 left-0" />
    <button onClick={loadModel} className="bg-blue-500 text-white px-4 py-2 mt-4 rounded">
     Start AI Detection
    </button>
```

```
    <p className="mt-2 text-lg">{text}</p>

    {/* 3D Scene */}
    <Canvas className="w-full h-96">
      <OrbitControls />
      <ambientLight intensity={0.5} />
      <Text position={[0, 1, 0]} fontSize={0.5} color="yellow">AI AR Model</Text>
    </Canvas>
  </div>
 );
};

export default AIMagicPen;
```