

A LOCAL MEDIAPIPE READER

Read with your hand.

finger-read tracks twenty-one hand landmarks on your device and turns held poses into reading controls. Nothing from the camera is stored or uploaded.

01 **POINT ANY DIRECTION**
Tilt one finger, or thumbs-down

Scroll and pan, continuously.

02 **OPEN-PALM WIPE**
Wave left or right

Turn the page.

03 **PINCH TO ZOOM**
Touch thumb and index, then spread

Zoom in and out.

Hold a pose and the page keeps moving - no arm gymnastics.

FIVE-MINUTE CODE TOUR

Two surfaces, one engine.

The web app is an immersive reader for your own files. The Chrome extension brings the same poses to real browser tabs. Both read thresholds from a single config file.

WEB**app/**

Full-screen reader, on-device PDF rendering, camera picture-in-picture.

EXTENSION**extension/**

Manifest V3 side panel with a bundled model and private local runtime.

CONFIG**gesture-config.json**

Shared pose thresholds and per-surface scroll and zoom gains.

NO LOGIN / NO API KEY / NO UPLOAD

Start with the web reader, then load the extension for real browser control.

WHY HANDS?

Reading deserves its own input.

Every mainstream way of moving through a document was designed for a desk. The mouse assumes a flat surface, the trackpad assumes a lap, and the touchscreen assumes the device is within arm's reach. Reading is different: it happens leaning back, standing at a kitchen counter with flour on your fingers, or across the room from a large display.

A camera changes the geometry. Twenty-one landmarks per frame describe the hand precisely enough to distinguish a thumbs-up from a fist, a pincer from a wave. That is all a reader needs: advance, retreat, magnify.

None of this requires new hardware. The webcam that has been staring at you through every video call turns out to be a perfectly good page-turner.

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POSES, NOT PATHS

Hold a shape, not a direction.

The first version of finger-read scrolled by tracking palm travel: move your hand down and the page followed. It felt magical for four seconds — until your arm reached the bottom of the frame and every attempt to reset position scrolled the page back up. Interaction designers call this the clutch problem.

Continuous controls want held poses. A thumbs-down is a state, not a journey: hold it and the page keeps moving, drop it and the page stops. Your arm never runs out of room because it never has to travel.

Discrete actions are the opposite. Turning a page is a single event, so it maps naturally to a single motion — a wipe. The engine stays disarmed until the hand settles, which is why the return swing of a wipe never turns the page back.

PRIVATE BY CONSTRUCTION

The frames never leave.

Gesture control from a camera only works socially if the camera footage is beyond suspicion. finger-read runs the MediaPipe hand-landmark model inside your browser; frames go from the sensor to the model to a list of coordinates without touching a network.

The downloadable extension goes further and bundles the model itself, so after installation it makes no network requests at all. A test suite enforces this: any fetch call, analytics beacon, or storage access in the extension source fails the build.

Privacy here is not a policy promise. It is an architectural property you can read in a few hundred lines of source.

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TUNE IT

One file, your reflexes.

No two hands move alike, and no two cameras see alike. Every threshold that decides whether your thumb counts as extended, how fast a wipe must travel, and how quickly the page scrolls lives in a single file: `gesture-config.json`.

The web reader and the Chrome extension read the same thresholds, so a calibration you like carries across surfaces. Edit the file, run two commands, and both are rebuilt.

This document itself is generated by a script in the same repository. Change the words, rebuild the PDF, and the sample library is yours too. The whole project is an invitation to fork.