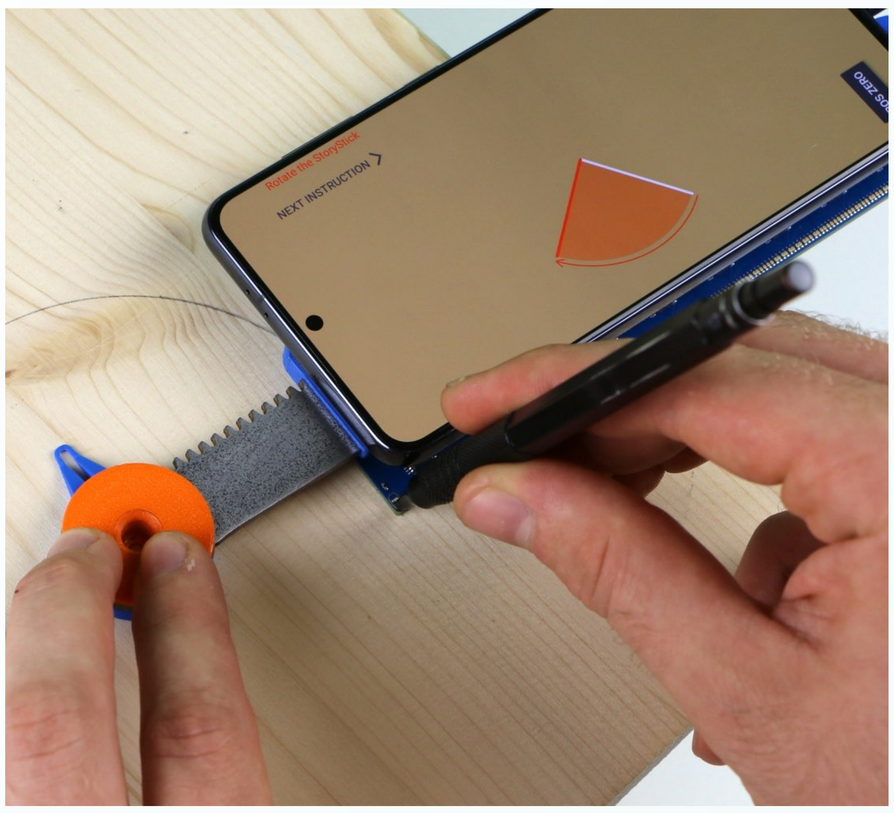

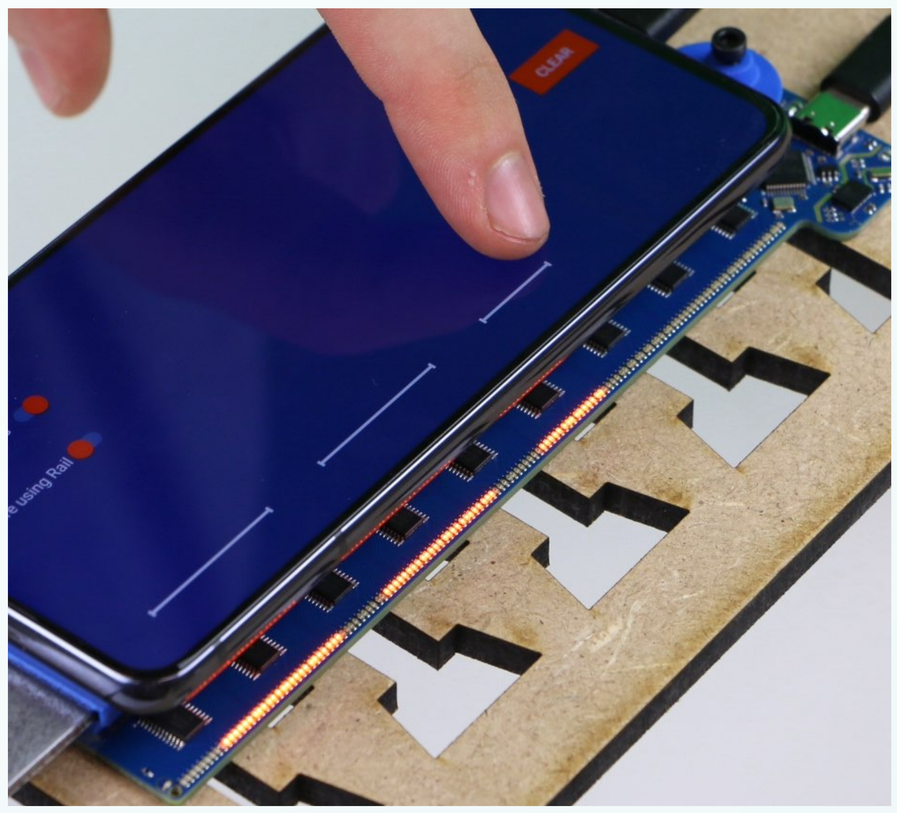

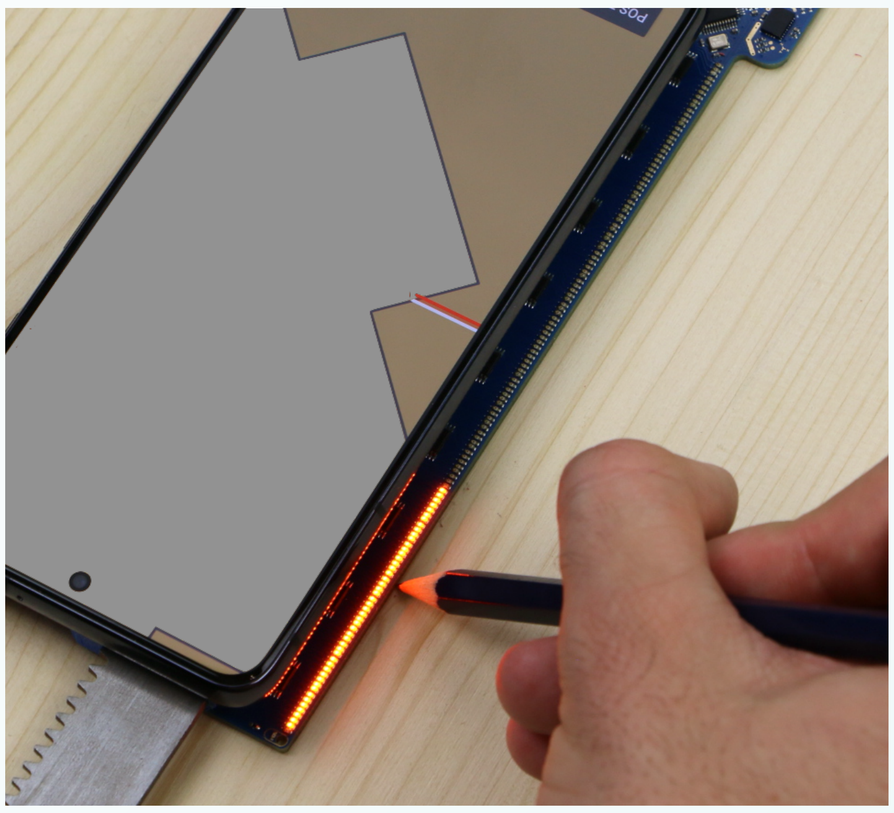

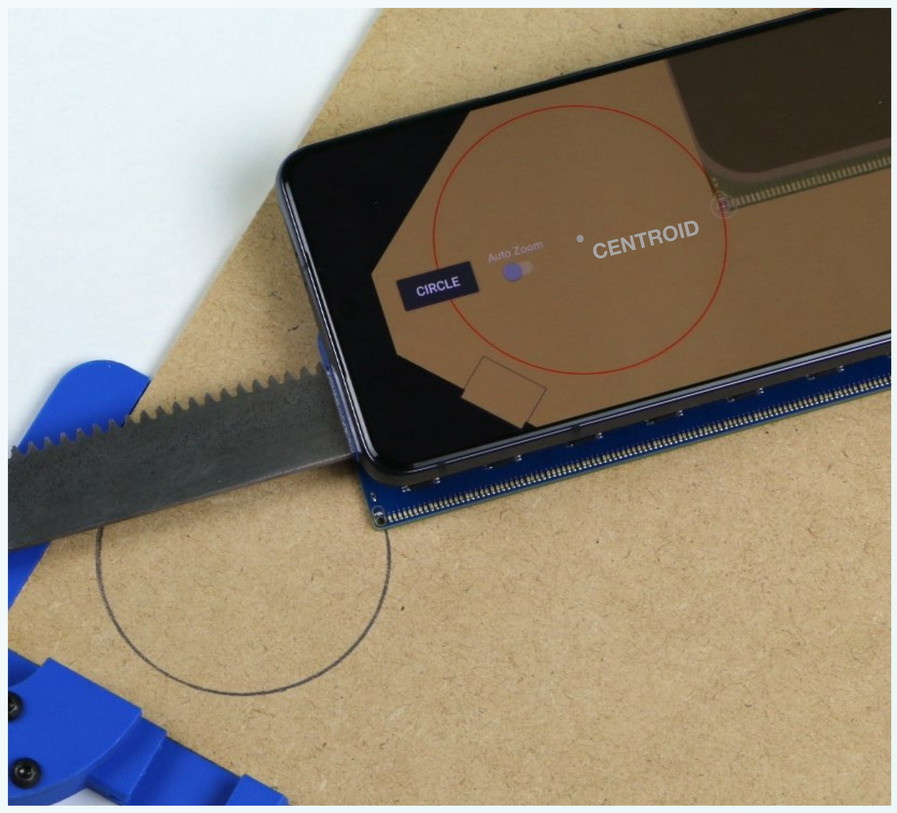

TECHNOLOGY OFFER

StoryStick++: Reducing Measurement Errors When Moving between Plan and Workpiece

INTRODUCTION

Dimensional measurement remains one of the most error-prone steps in making, engineering, and construction, even with highly precise tools. Most mistakes don’t come from the instrument, but from the surrounding workflow: choosing the right tool, aligning it, reading a scale, interpreting a plan, and transferring the result onto the material. As more projects start from CAD plans, this becomes even more fragile, since users must constantly switch between plan and workpiece while doing conversions and quick arithmetic.

StoryStick++ bridges the gap between the plan and the tool by bringing measurement and marking directly onto the material. It’s a smartphone clip-on that can load a 2D plan for plan-based layout, or be used entirely on the fly for quick measuring and marking. As you move it across the surface, the phone shows the relevant geometry at 1:1 scale with optional on-screen help, while an LED scale points to the exact location to mark or measure with sub-millimeter accuracy.

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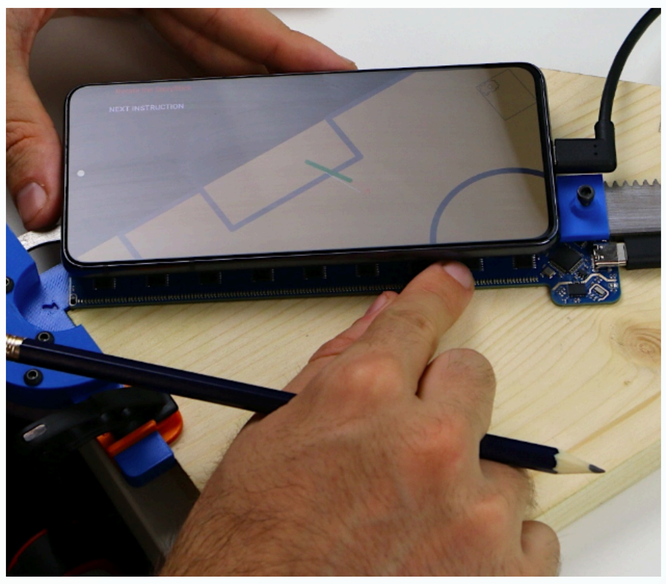
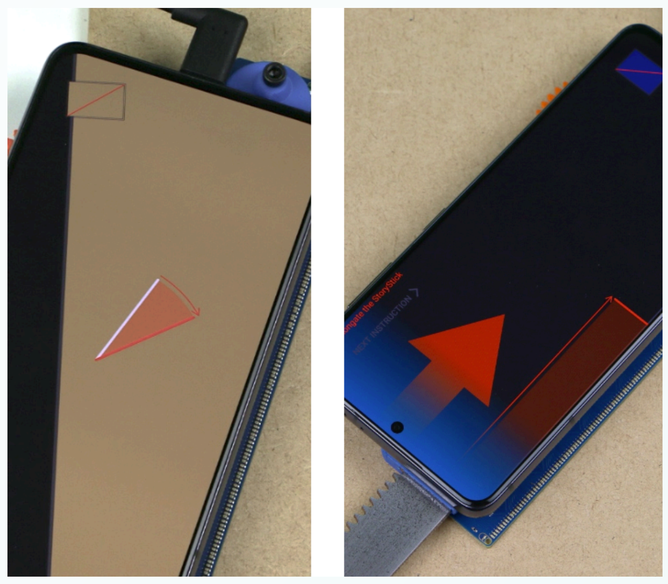
KEY FEATURES



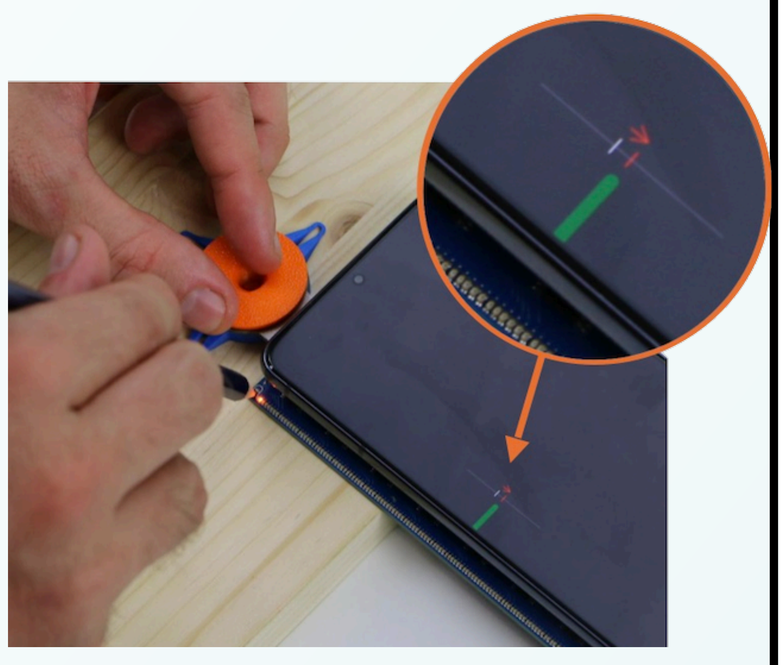
1:1 ON-MATERIAL VISUALISATION

Import 2D drawings (SVG/DXF) or work on the fly, and view guides, reference lines, and layout features at 1:1 scale directly on the workpiece.



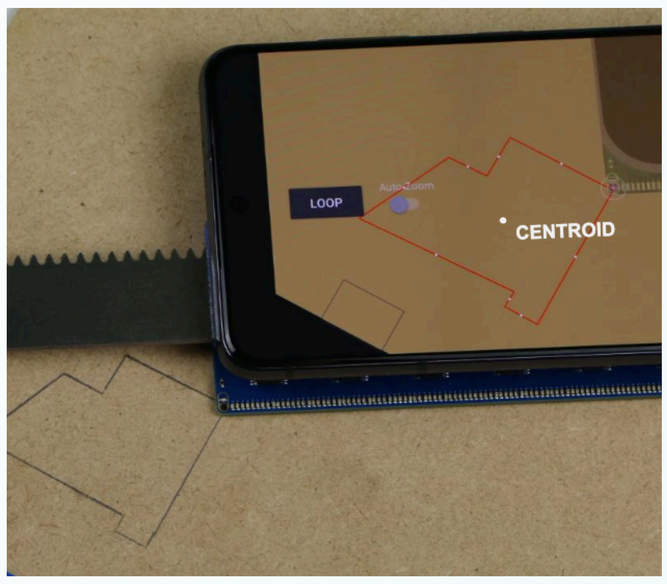
COMPUTATIONAL ASSISTANCE

By computing the easiest sequence, StoryStick++ simplifies complex marking tasks, and lowers the required geometric know-how.



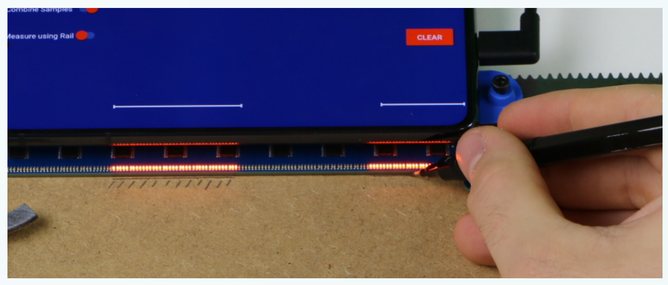
SUB-MILLIMETER ACCURACY

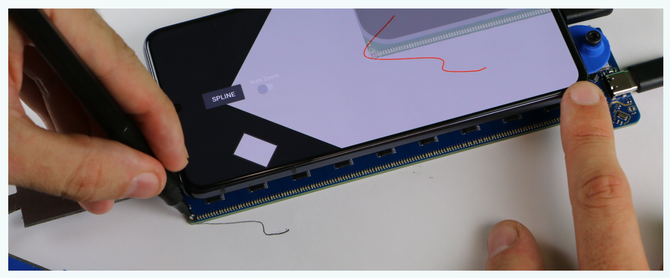
Magnetic and inertial sensing enable precise measurement and marking beyond millimeter resolution.



TRACE-BASED MEASURING

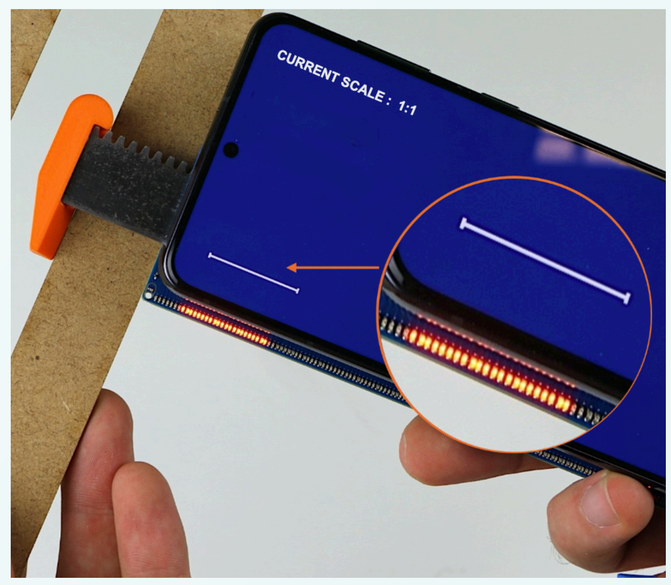
Digitise geometric or freehand shapes by tracing, and automatically compute the centroid, perimeter, area or symmetry axes.





VISUALLY ASSISTED MARKING

StoryStick++ supports drawing straight lines, curved features like circles and arcs, or non circular freehand strokes.



MULTIPLE READOUT STYLES

Measure and reformat the result into different readout styles, adjust its scale, or retrace the captured shape to another location.

ADVANTAGES

StoryStick++ improves measurement and layout reliability by:

- reducing reliance on numbers and units
- simplifying complex layout steps with visual guidance
- enabling sub-mm accuracy through high-precision sensing
- speeding up layout by computing the most efficient marking sequence.

INVENTORS

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MORE INFORMATION

Scientific publication: S. Konings, M. Claesen, D. Leen, M. Lambrichts, X. Vaes, R. Ramakers, ACM CHI 2026.
Video demonstration : https://youtu.be/cgT5Pp7PKGg

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