



Parametric Laptop Stand



Shapr3D

[VIEW IN BROWSER](#)

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Summary

Fully parametric folding laptop stand designed from scratch in Shapr3D.

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Fully parametric folding laptop stand designed from scratch in Shapr3D. Set your display size and the model updates automatically; a thickness variable lets you tune looks and material use. Adjustable height via angled notches with a guide channel, folds flat for storage.

This is v2 after a full round of printed prototypes. Changes from v1: the snap-fit pins were replaced with elastic pins that act as their own spring (print these in PETG, not PLA), clearances were tuned by printing test samples in 0.025–0.05 mm steps, and the folding pin was relocated so the vertical supports no longer collide and the stand folds completely. All parts export straight from Shapr3D to PrusaSlicer.

Print notes

- Body parts: PLA or PETG, 0.2 mm layers, 15–20% infill

- Elastic pins and retainer discs: PETG required (PLA is too stiff and won't seat properly)
- Supports: reduce top interface layers and raise bottom contact distance for clean removal (settings in the article)
- Pin clearances are 0.1 mm at the tip, 0.3 mm mid-shaft. Printer calibration matters here

View model here: https://app.shapr3d.com/v/gn0mg3H7p0AlOWuX_fJpR

Full article with print settings and assembly guide: <https://www.shapr3d.com/content-library/how-to-design-a-parametric-laptop-stand-for-3d-printing>

Build Video:

<https://www.youtube.com/watch?v=Rrekbn9-Zvw>

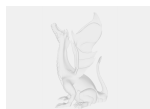
Modeling video:

<https://www.youtube.com/watch?v=AgFApKpygiU>

Model files



parametric-laptop-standshapr.step



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