



Topology Optimized Laptop Stand (V1)

B Belske

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Summary

My first attempt at using topology optimization to design a laptop stand.

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My first attempt at using topology optimization to design a laptop stand. The model was optimized based on volume (15% of original model) for supporting a load on the upper faces.

I printed with 25% infill and it works quite well for my heavy 15" laptop. The model needs to be downscaled to fit on the prusa i3mks bed. It prints without supports, but I had a small amount of stringy stuff on the overhangs. I didn't smooth the optimised sections because i like the way it looks now.

If your laptop doesn't have a ridge at the back it will likely slide off. Could be improved with a lip at the front to stop sliding or rubber pads.

Model files



to-laptop-stand-v1.stl

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