

# PCBend: Light Up Your 3D Shapes With Foldable Circuit Boards [Supplemental Material]

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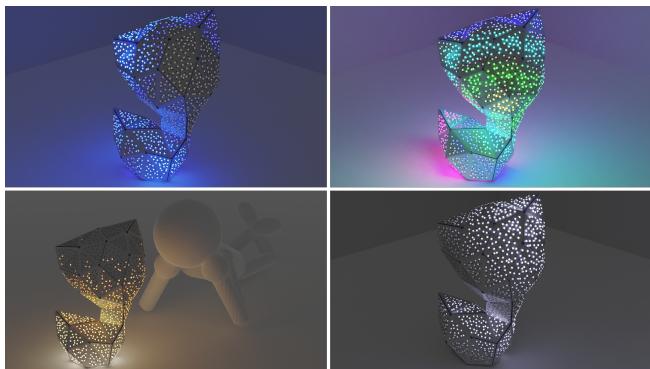


Fig. 1. Virtual results (preview) of our *cat* model.

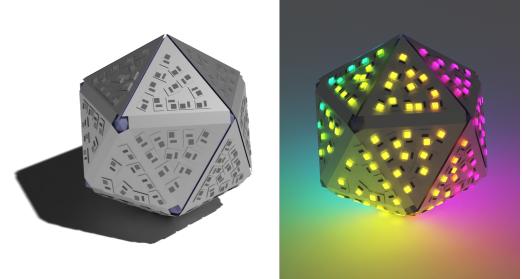


Fig. 2. Virtual results (preview) of our *icosa* model.

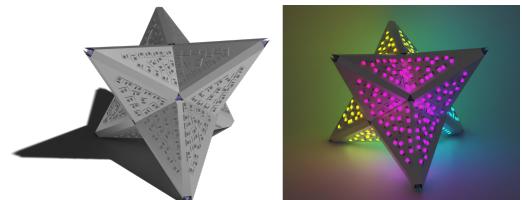


Fig. 3. Virtual results (preview) of our *star* model.

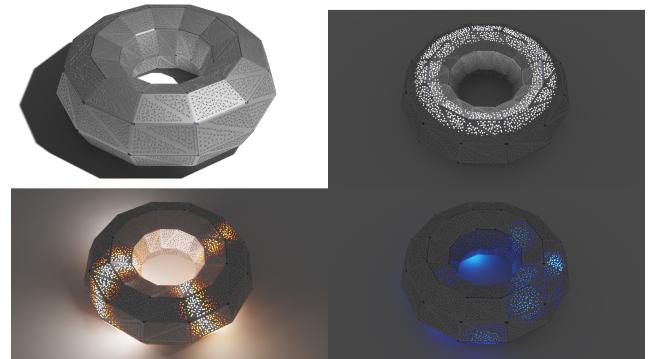


Fig. 4. Virtual results (preview) of our *sqtorus* model.

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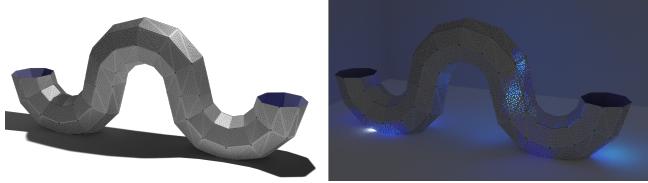


Fig. 5. Virtual results (preview) of our squiggly model composed of 6 *sqtorus* parts.

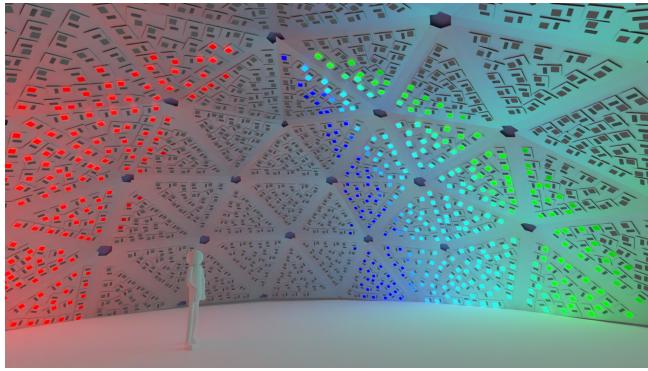


Fig. 6. Futuristic example: person standing under a *dome*.



Fig. 8. *batman* and *cat* model fabricated with big LEDs using the maximal density of our placement algorithm.

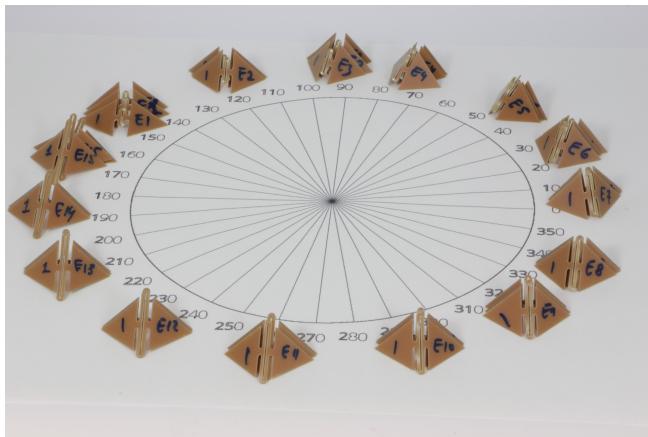


Fig. 7. Experimental Setup: We fabricated both full and half-hinges of varying lengths using 0.6 mm thick FR4 with two copper layers. They were slowly bent by hand on a circular dial on which the bending angle was read. We observed that damage to traces on hinges only occur when the hinge has bent to an extent that it changes its color to yellow. We recorded the angle of the first naked-eye visible change of color to yellow for each hinge. A conservative safe bending angle is derived from this value to avoid any yellowing of the hinges and is showcased in Figure 5 of the main text. This safe bending angle is further tested by performing a series of fatigue tests.