Overcoming the Air Gap: Experimentation on Data Transfer

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Privacy online can be ensured by air gapping computers and networks—isolating a system and allowing only physical, external devices to access data. Air gapping a computer can prevent malicious software from stealing sensitive information, but there are ways around this airtight security. In this experiment, the light, vibrations, and the ultrasonic sounds a computer can produce show how data can be transferred from an air-gapped computer. In order to prevent theft of data, installing detection programs for malicious or suspicious activity, disabling audio, and limiting the functionality of visuals are several solutions. In today's bustling virtual world, privacy might just require a few extra steps.