



AR.Drone
\$300 ardrone.parrot.com

Parrot incorporated some amazing technology into the AR.Drone. The quadricopter (which has four propellers as opposed to one) is easy to navigate thanks to two cameras — one facing forward, the other facing down. The drone is able to tell when it flips over by sending out ultrasound waves that “see” the ground.

One of the most remarkable things about this device is that it can be controlled by an iPod touch, iPhone, or iPad — although I advise you to master it indoors before you take it outside and remove the indoor hub with its propeller protectors.

—Robert M. Zigmund



Vuzix Wrap 310XL
\$250 vuzix.com

The Vuzix Wrap 310XL heads-up display is undeniably cool. It’s basically a pair of opaque glasses with mini 428×280, 24-bit color LCD displays sitting right over your eyes — the manufacturer claims that it’s equivalent to viewing a 55-inch 16:9 TV from a distance of 10 feet. You can use the unit to watch a TV show on the train without nosy passengers looking over your shoulder or catch a movie at night while your partner is asleep. You can even plug them into the VGA port of your computer and use the glasses as a monitor. (RCA and iPod/iPhone/iPad connectors come in the box; USB and VGA adapters are available from the manufacturer’s website.)

—JB



Alibre Design Personal Edition
\$99 alibre.com

Most 3D parts begin life as 2D sketches that are pushed and pulled into 3D models on your computer screen. Some programs use a kind of wire-mesh frame to create objects (Blender, Google SketchUp, Rhino), and others use a more direct mathematical language (OpenSCAD), but the best ones use actual solid shapes (Alibre Design, SolidWorks, Inventor, Pro/Engineer).

What really differentiates the solid modeling programs is their ability to create assembly files that include multiple parts, which relate to each other just the way they relate in real life. This way, one part can represent an off-the-shelf motor, another part can be exported for 3D printing, and another can be made into a drawing to send to a laser cutter.

Of all the solid modeling programs, the only one that offers a commercial version (not a student license with watermarked parts) for less than \$4,000 is Alibre Design, and it’s way less — just \$99. Alibre PE has all the stuff you need and leaves out the stuff you don’t. Unless you’re a power user, you’ll never miss the fancy stuff.

—Dustyn Roberts

