
Wearable Electronics

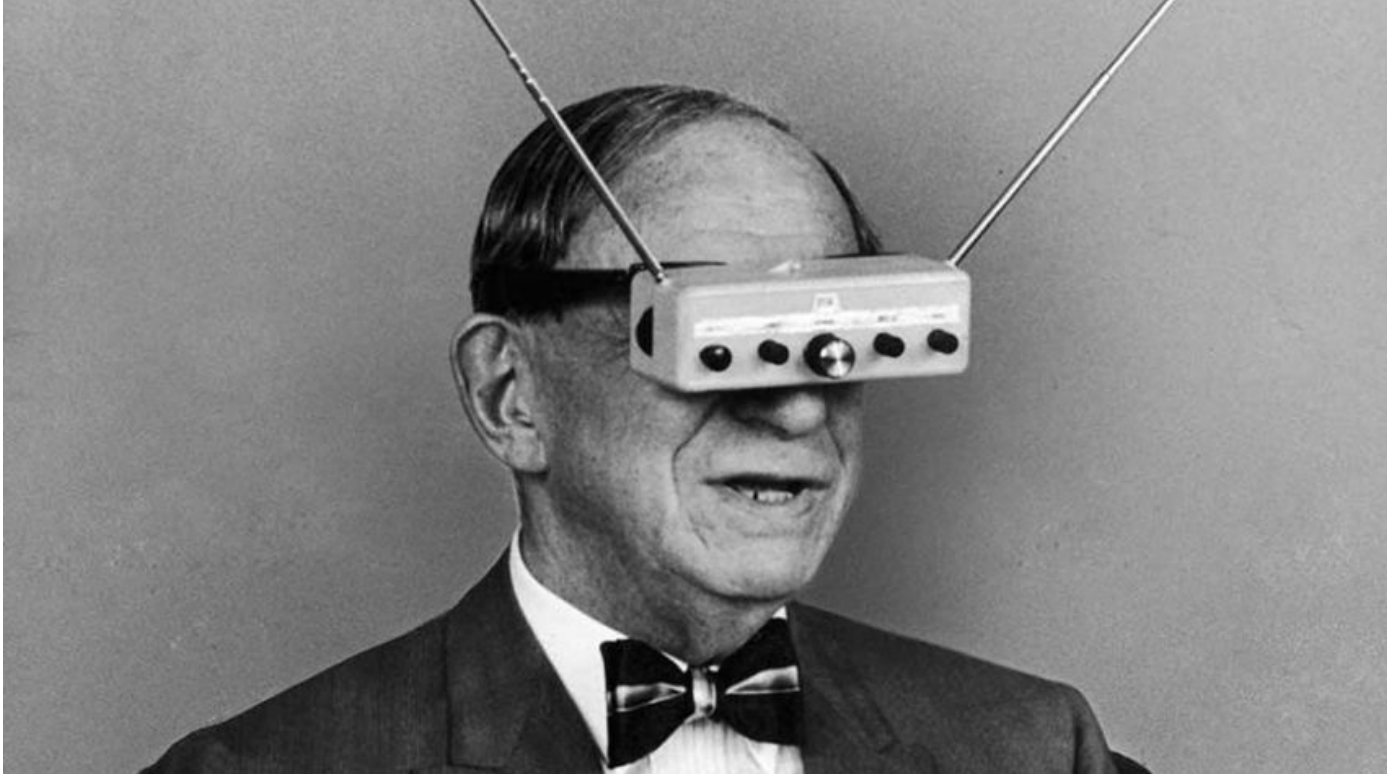
Makerspace In Family & Consumer Science

— Hicksville Public Schools —

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What is your definition of wearable



What Is Wearable Electronics?



Wearables Defined

- Wearable technology is clearly gadgets you wear, but there are important distinctions.
- They have smart sensors, and make use of a web connection, usually using Bluetooth to connect wirelessly to your smartphone. They use these sensors to connect to you as a person, and they help you to achieve goals.

How do you wear them?

- Smartwatches, fitness trackers, head mounted displays, smart clothing, implantables, smart jewelry, wearable exosuit

Wearable Biosensors

DETECTION OF:

- DRUG ABUSE,
- DRUG CRAVINGS
- STRESS
- GLUCOSE LEVEL
- BLOOD ALCOHOL CONTENT IN REAL TIME



Google And Levi's Made a Smart Jean Jacket



A Shape Changing Shirt Displays How Your Workout is Going



BSX LVL Wearable Hydration Monitor: Dehydration Detector

- BSX created the wrist-worn LVL, the first wearable to measure hydration in real time.
- This wearable uses near-infrared light to peer beneath it and record changes in blood color, which are indicative of hydration levels.
- If the wearer is dehydrated, it alerts them with an on-screen message.
- \$199



OnCourse Goggles: GPS for Swimmers



- It's tough for open-water swimmers to cut through waves in a straight line.
- OnCourse Goggles keep them on track, no surfacing necessary.
- A swimmer sights a way-point and clicks a button to lock it into an electronic compass and shore up the path.
- Green, yellow and red LEDs in the corner of each eye provide direction. Green in both means on course, red in the right eye means veer left, and vice versa.
- \$200 (est.)

NEW! Wearable Electronics **NEW!**

A collection of projects that combine fabrics, electronics and programming



Turn signal biking jacket



Trigger colorful animations while you walk



Wearable toy piano