

Hertzian Space

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What is the conversation between your cordless phone and a wireless network?

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Fundamental to Modern Life

Mobile Phones
Radio/TV
Satellite Communications
Wireless Networking

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Problem: Electronic Garbage (RFI)

Radio Frequency Interference:
unintentional emission of
electromagnetic energy

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Why does anyone care?

As long as RFI doesn't bother anyone,
it's no big deal, right?

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It's fun.

**Archeologists turn garbage into history.
Muckrakers turn garbage into news.**

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It's fun x 2

**Hackers turn discarded information
into power.**

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Garbage is very valuable.

Hold that thought....

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How Do We Perceive the World?

Active, direct, intentional

vs.

Passive, indirect, reflexive

vs.

philosophies of perception

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Situational Awareness

"Show, don't tell."

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What Just Happened?

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You already do this.
And you're good at it.

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Garbage is valuable

What if you could perceive the garbage in
Hertzian Space?

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The Matrix is Revealed



(this would suck after about 3 minutes)

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Perceptual Options

Sight

Hearing

Taste

Smell

Touch

(thank you, philosophers)

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Haptic Paths

Mechanical

- buzz
- pinch
- poke
- tap
- stroke

Environmental

- temperature
- textures

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Touch You Where?

Hands

Neck

Waist

Wrist

Fingers

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Prior Work

Keio's belt

Pathfinding shoes

Nav belt in *Make*

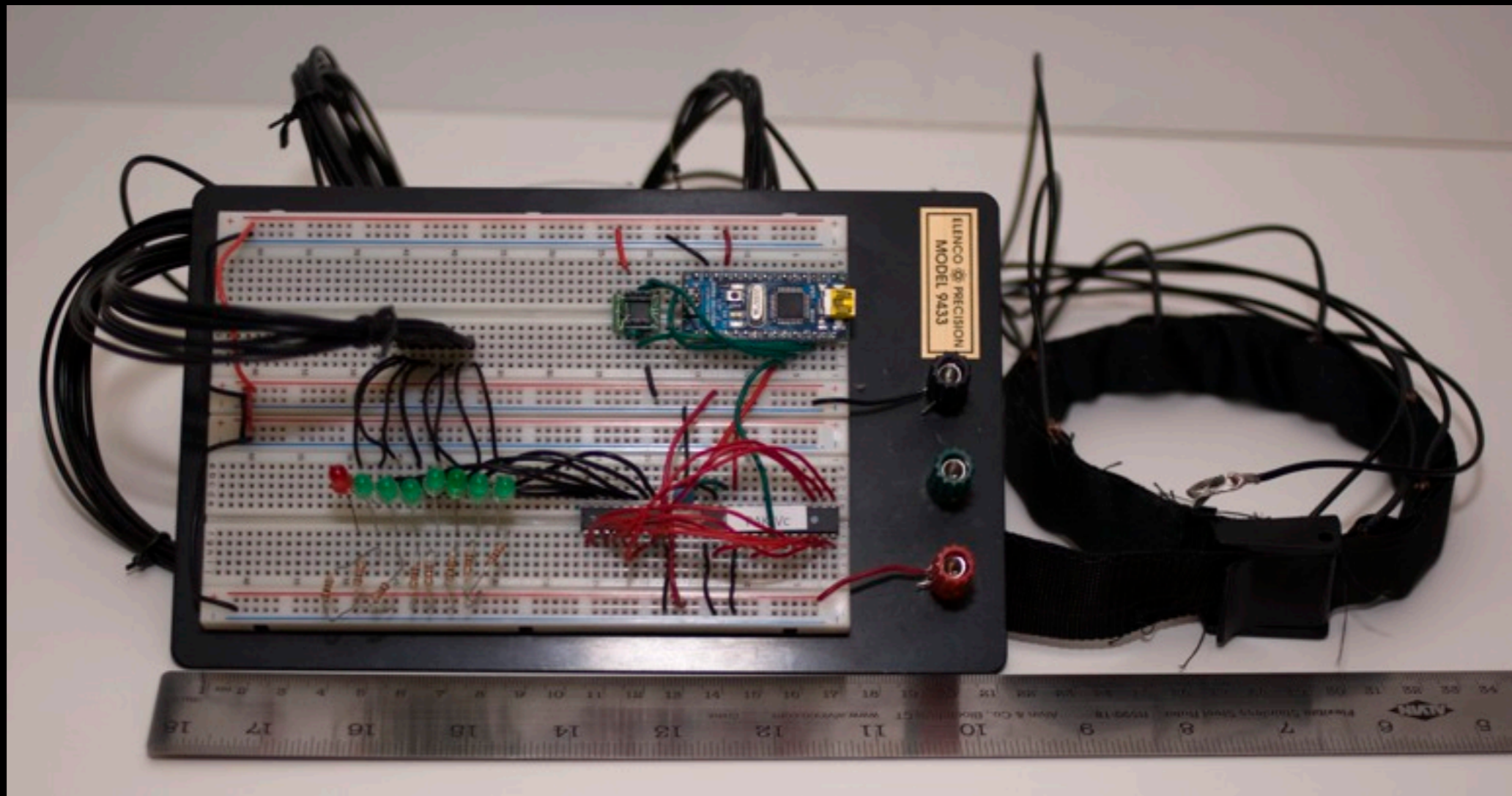
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Belts and Bands

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Perceptual Tools

software defined radios
public networks

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What About Garbage?

cameras are a baseline

way cooler than leaky microwaves

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The FUTURE!

develop language for touch
divide notification and data
look for real garbage

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