

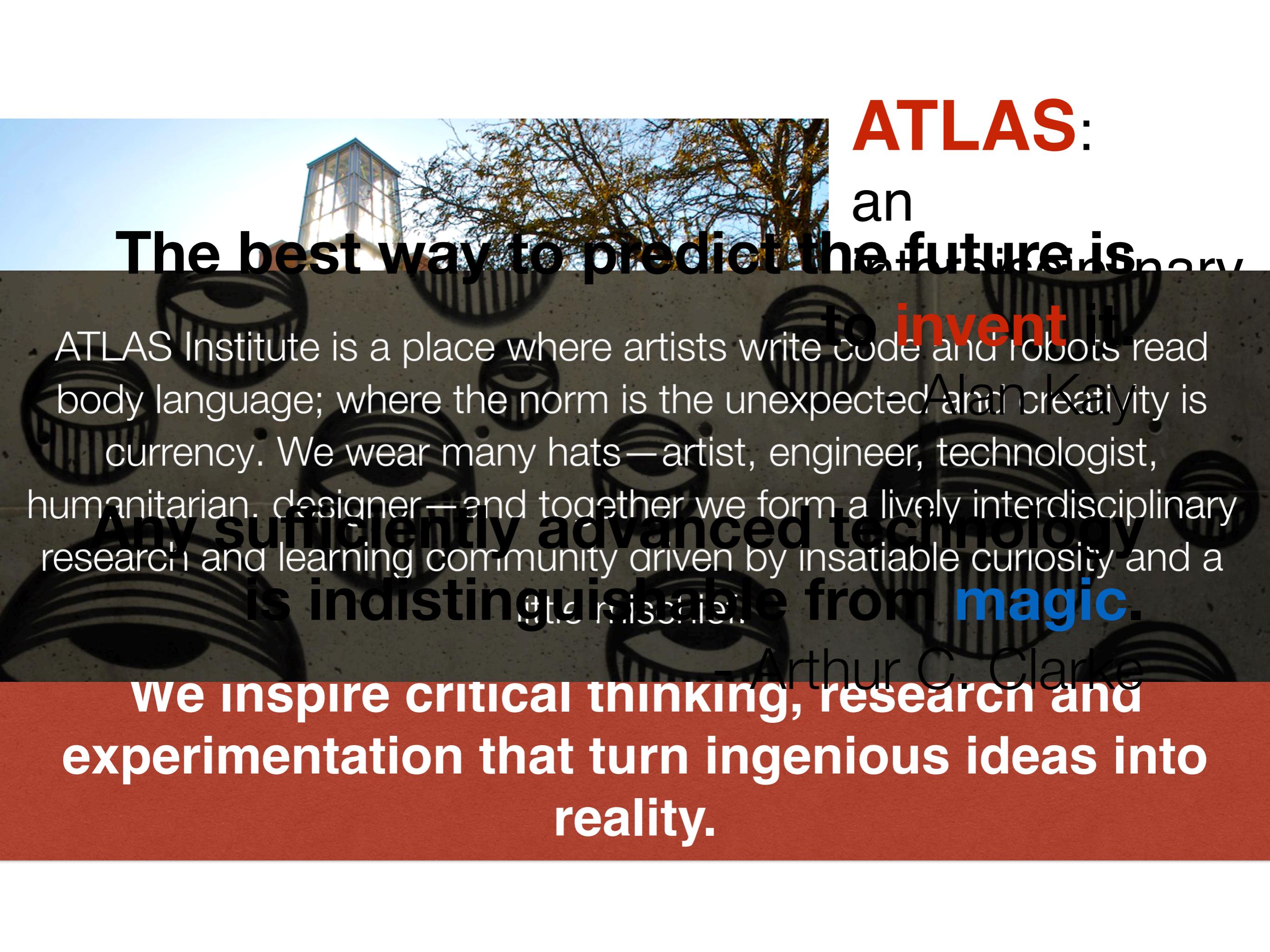


University of Colorado **Boulder**

<http://atlas.colorado.edu>

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The best way to predict the future is to invent it.

ATLAS:
an
interdisciplinary

ATLAS Institute is a place where artists write code and robots read body language; where the norm is the unexpected and creativity is currency. We wear many hats—artist, engineer, technologist, humanitarian, designer—and together we form a lively interdisciplinary research and learning community driven by insatiable curiosity and a

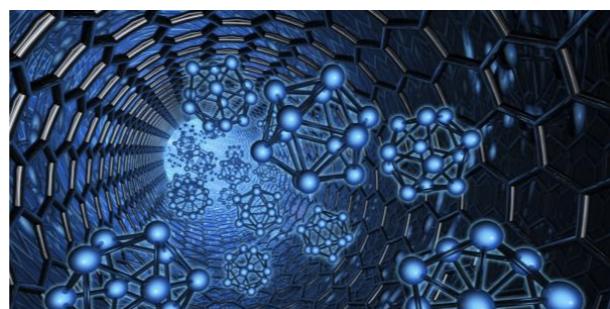
**Any sufficiently advanced technology
is indistinguishable from magic.**

—Arthur C. Clarke

we inspire critical thinking, research and experimentation that turn ingenious ideas into reality.

LABS & STUDIOS

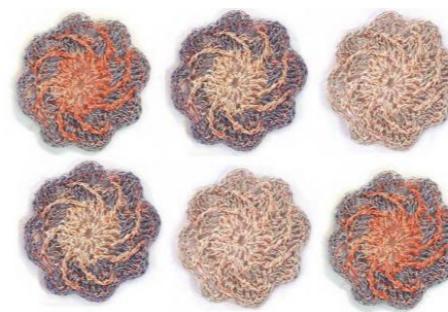
Emergent
Nanomaterials



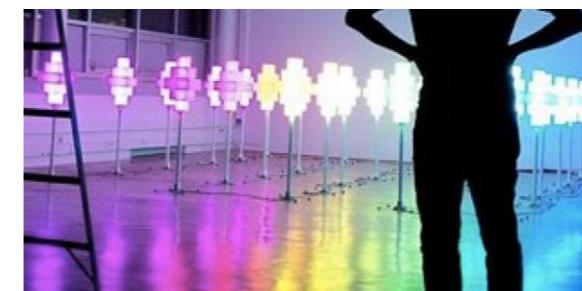
Playful
Computation



Interactive
Robotics
& Novel
Technology



Unstable
Design

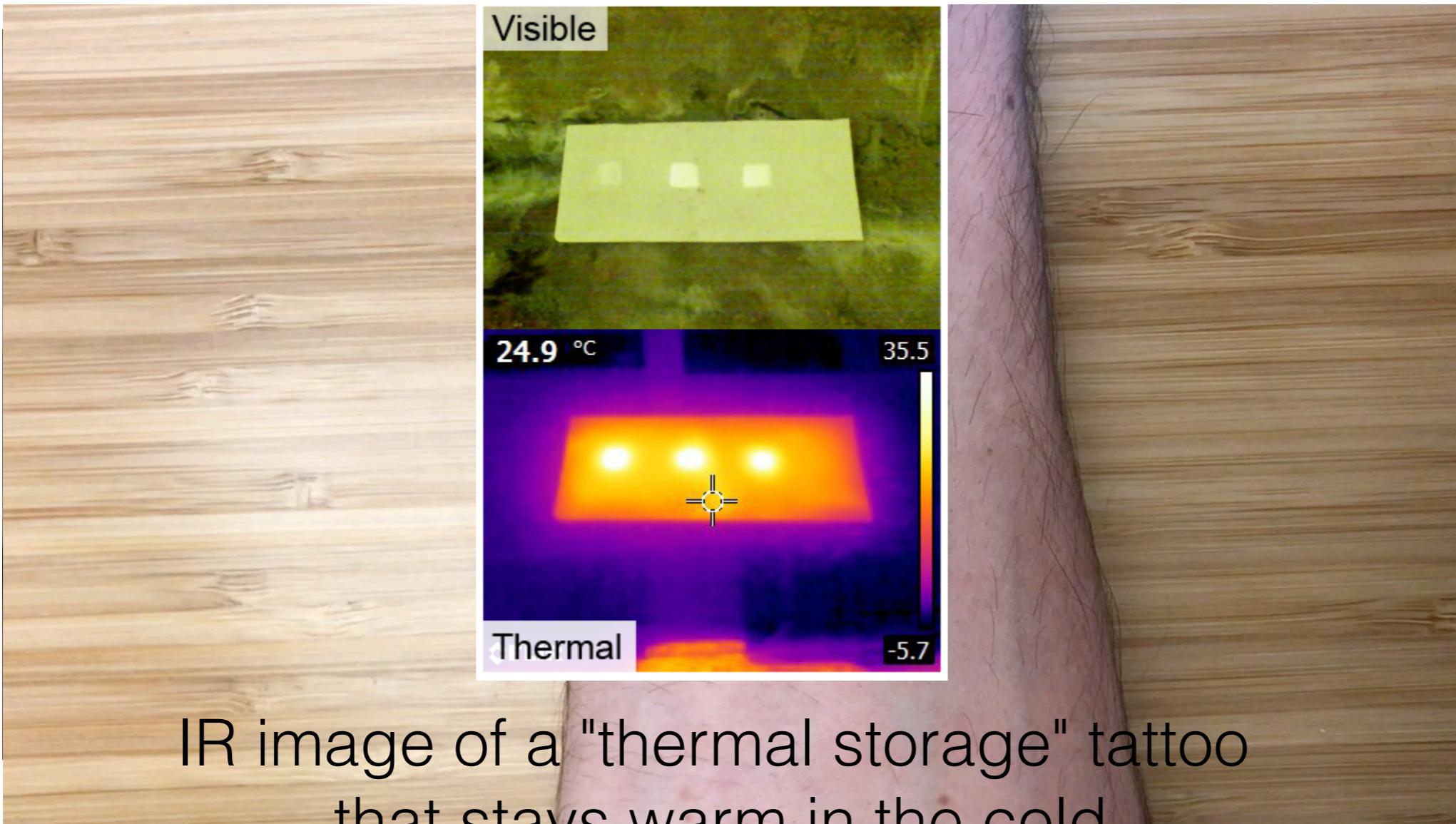


ACME



THING

Emergent Nanomaterials Lab



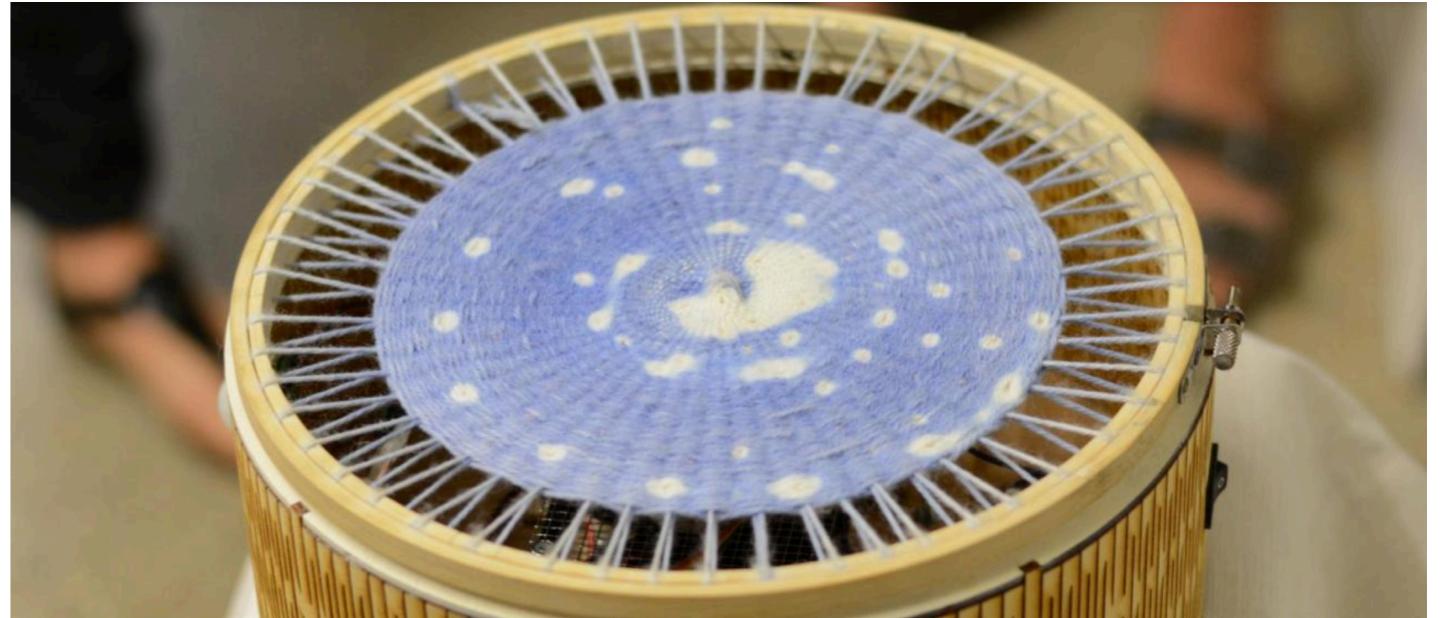
IR image of a "thermal storage" tattoo
that stays warm in the cold
"solar powered" tattoo visible only under ultra-violet light

inventing the future of materials

Unstable Design Lab



inventing the future of textile fabrication



Field Computing



DATA HARVEST



HAND-SUBSTRATE INTERFACE



SPORE STEPPER

Design Probes

body sensitive technology



SKIN: Tattoo

<https://www.youtube.com/watch?v=NM1VuN5louc>

emotional sensing



SKIN: Dresses

https://www.youtube.com/watch?v=t5h_pGnL5I0

The Smoke Dress



cloud of smoke emission

<http://hautemacabre.com/2013/01/smoke-dress-anouk-wipprecht-aduen-darriba/>

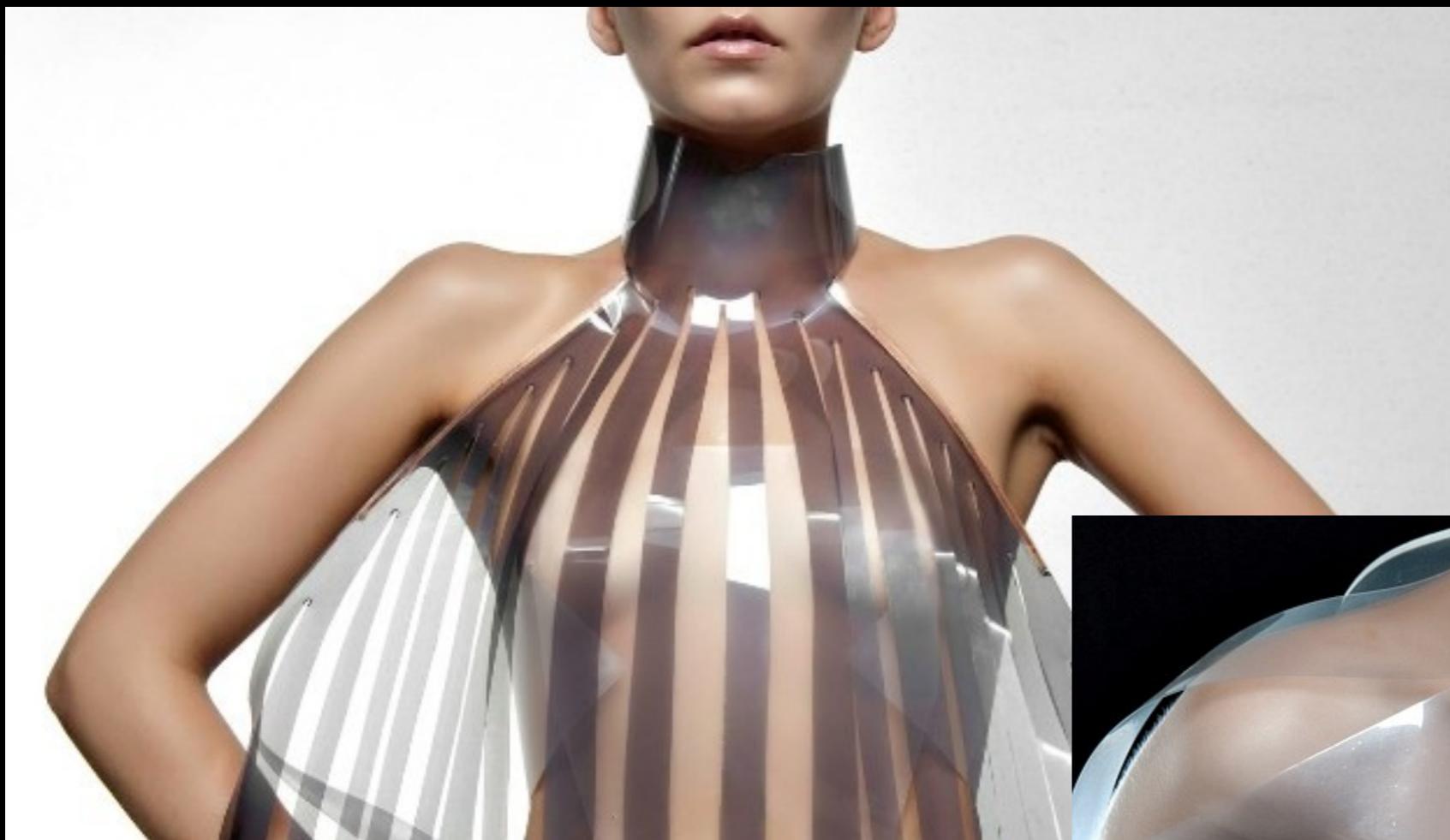
GER Mood Sweater



lie detector technology for mood

<http://moodsweater.com>

Intimacy 2.0



turns transparent

<https://www.studioroosegaarde.net/project/intimacy>

The DareDroid dress



interaction-based cocktail making

<http://janetingley.com/daredroid/>

The Printing Dress



You are what you tweet!

<https://www.microsoft.com/en-us/research/publication/the-printing-dress/>

The Hövding - airbag for cyclists



collar expands into a helmet

<https://hovding.com>

The FOKI vacuum shoes



COURTESY ADIKHA TITUT TRIVUGO

rotary cleaners on the soles

<http://www.bitrebels.com/technology/foki-the-shoes-that-clean-the-floor/>

Sensoria Socks



identify injury-prone running styles



HIGH TECH FASHION

Trend Hunter

<https://www.youtube.com/watch?v=OlphvIbGMTI>



Transformer Dresses

<https://www.youtube.com/watch?v=-Jz4-S1kLYI>



<https://www.youtube.com/watch?v=Ae81FcczsI8>

T

<https://www.youtube.com/watch?v=LjnuHmxRbxI>



POLO TECH

POWERED BY 

<https://www.youtube.com/watch?v=zipGvqaSJiE>

Wearable Tech?

**interplay between
intention, insight, and innovation**

Super Heros / Super Human

TEI '11



Fifth International Conference on
Tangible, Embedded and Embodied Interaction

011###

TEI CONFERENCE

SUPER HERO
DESIGN CHALLENGE

NO 2

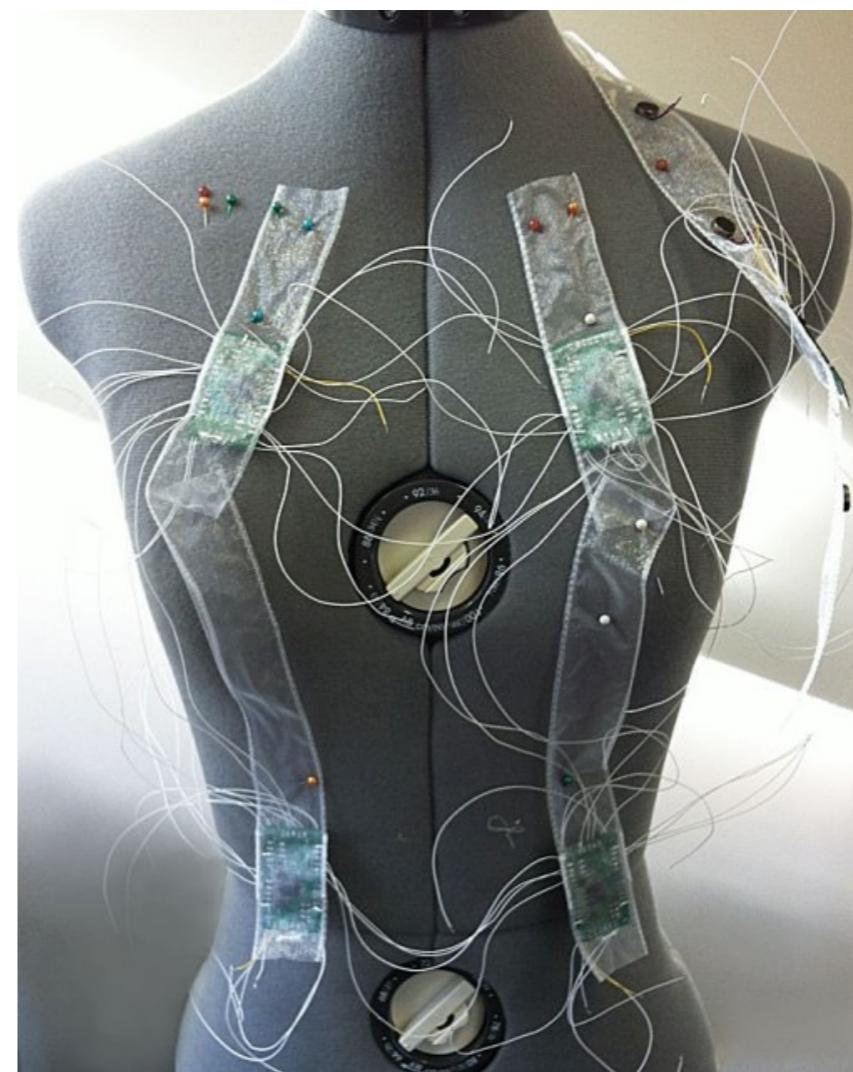
eps

2nd episode

SUPER HERO
DESIGN CHALLENGE

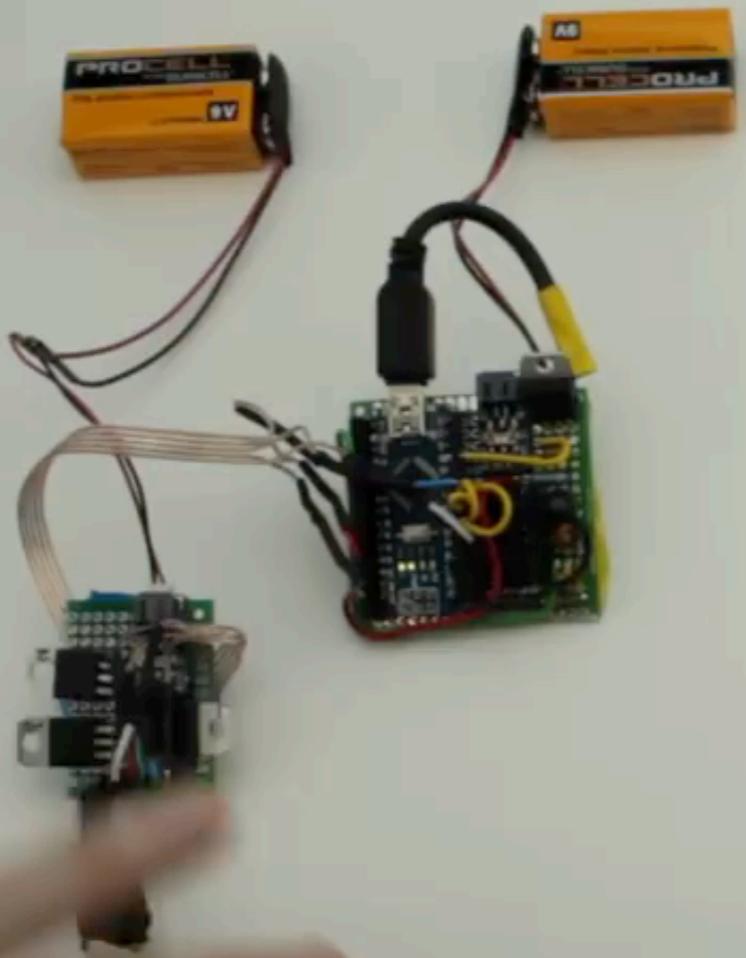
www.tei-conf.org/11

Flutter - textiles and robotics fusion



vibrotactile feedback for the hearing impaired

<https://halleyprofita.wordpress.com/projects/flutter/>

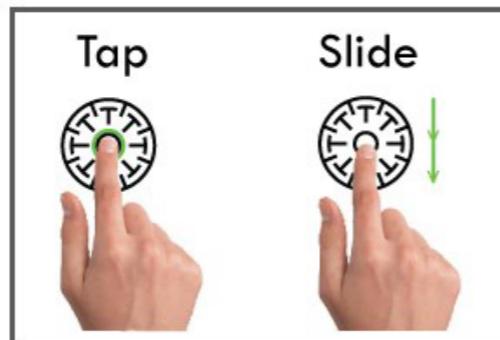
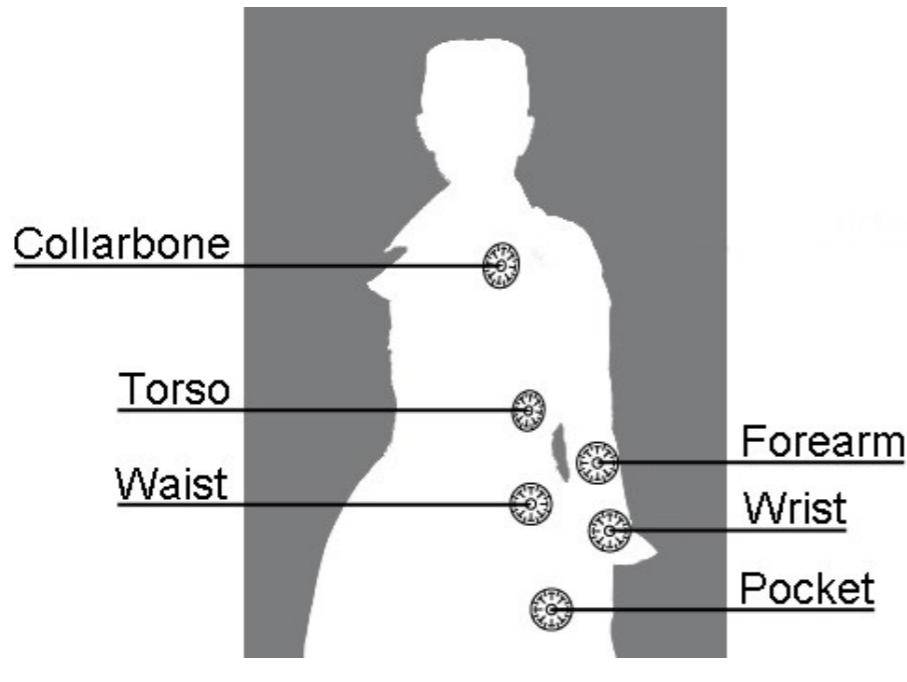


HÄIRIÖ

HUMAN HAIR AS INTERACTIVE MATERIAL

<https://dl.acm.org/citation.cfm?id=3173232>

Don't mind me touching my wrist



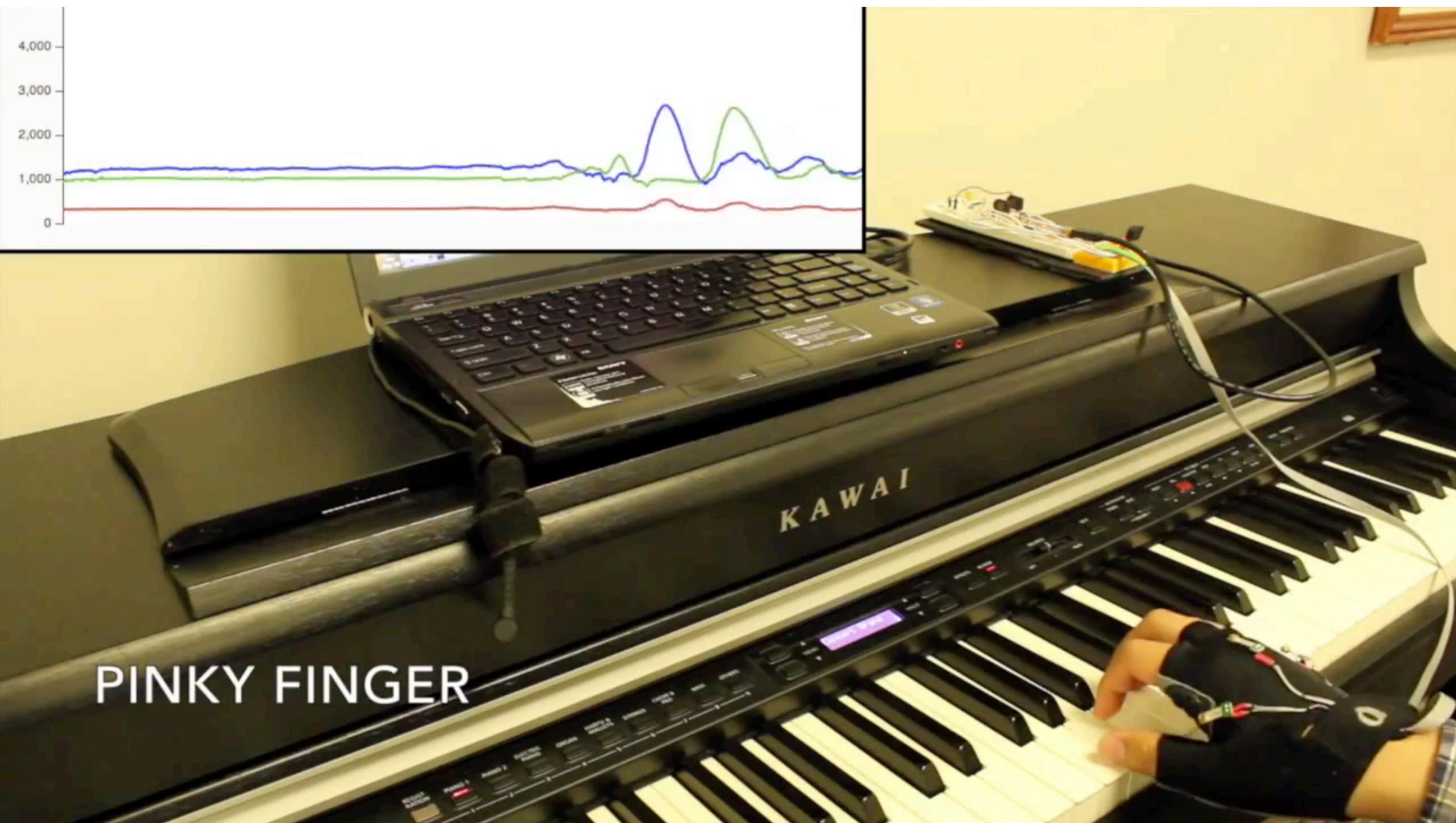
interacting with on-body technology

Piano Touch/Mobile Music Touch



<https://www.youtube.com/watch?v=xqlkZX0f7KA>

Tactile Teacher



<https://www.youtube.com/watch?v=iSWarg6kVqs>

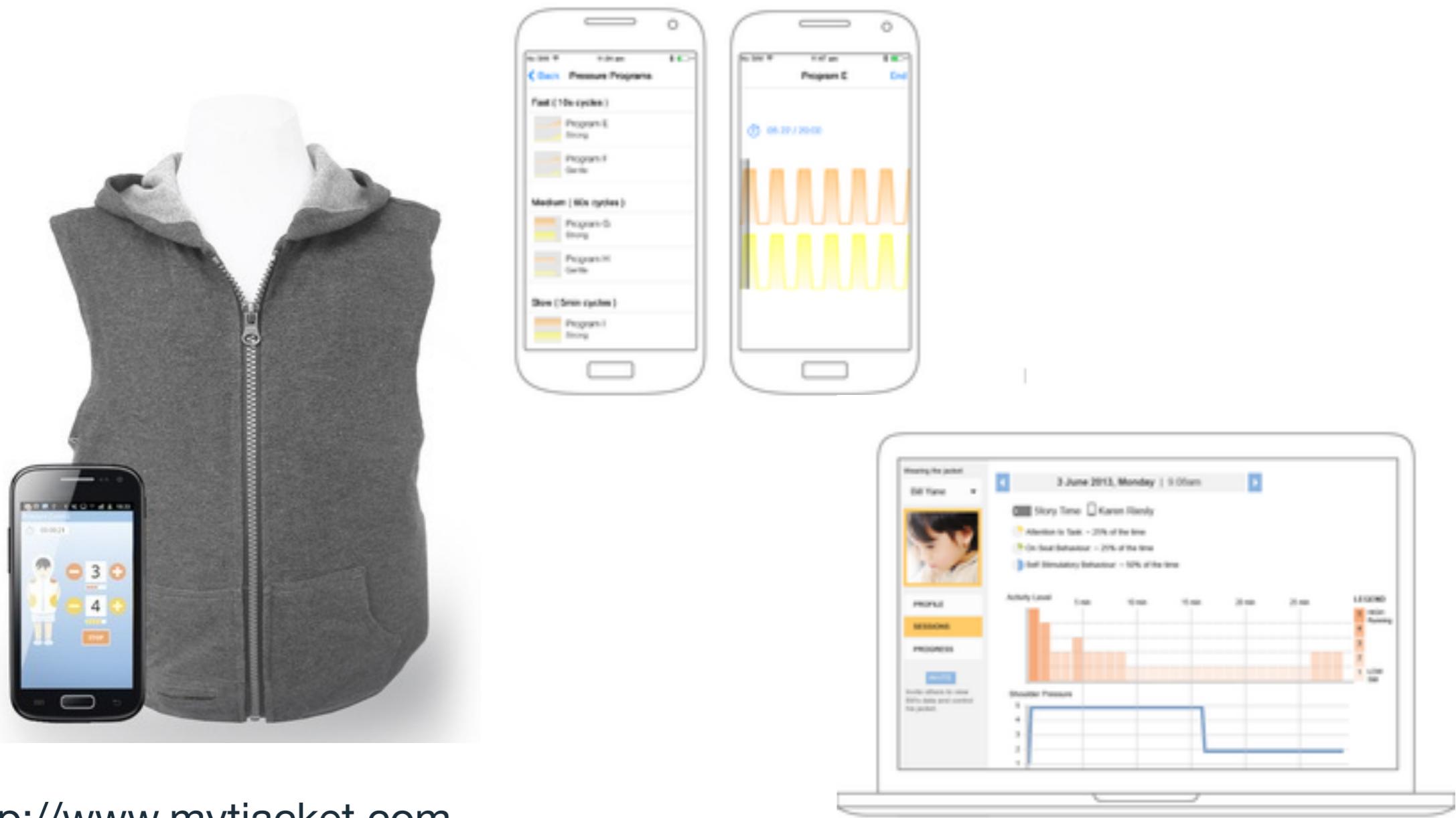


JACKET

Because Hugs Matter

<https://vimeo.com/69374334>

T.Jacket - because hugs matter



<http://www.mytjacket.com>

deep pressure therapy

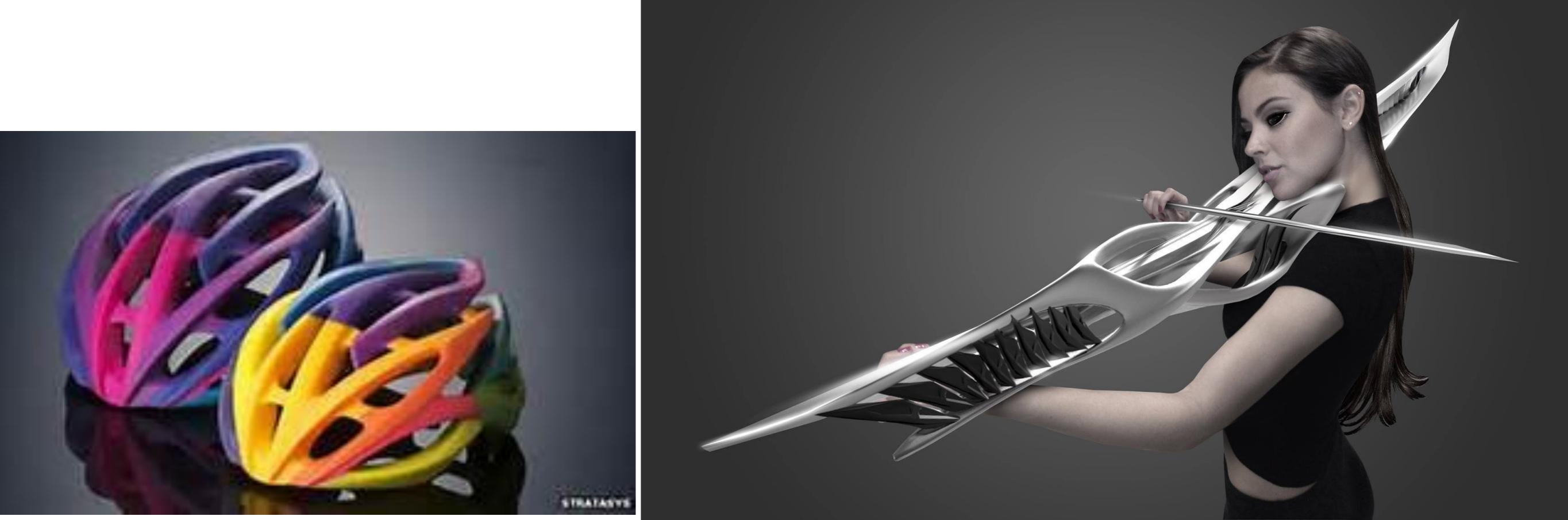
3D Printing?

- imagination
- inspiration
- innovation

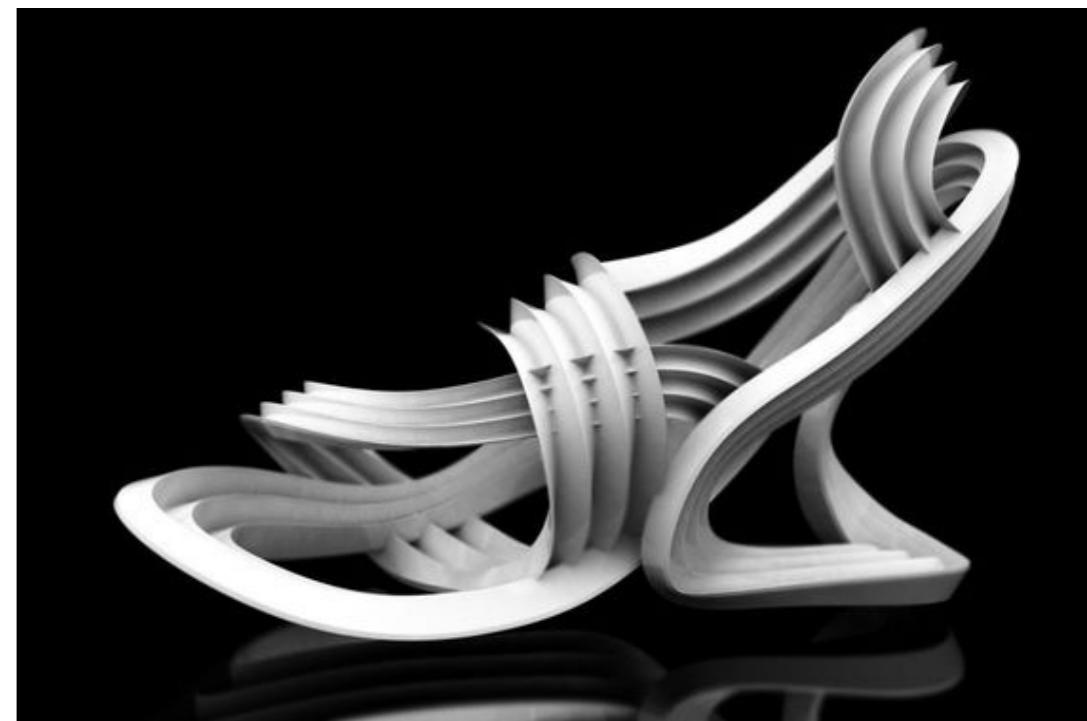


ArtisanWork™









Form & Function

- new material
- new shape & texture
- new fabrication technology
- new craftsmanship

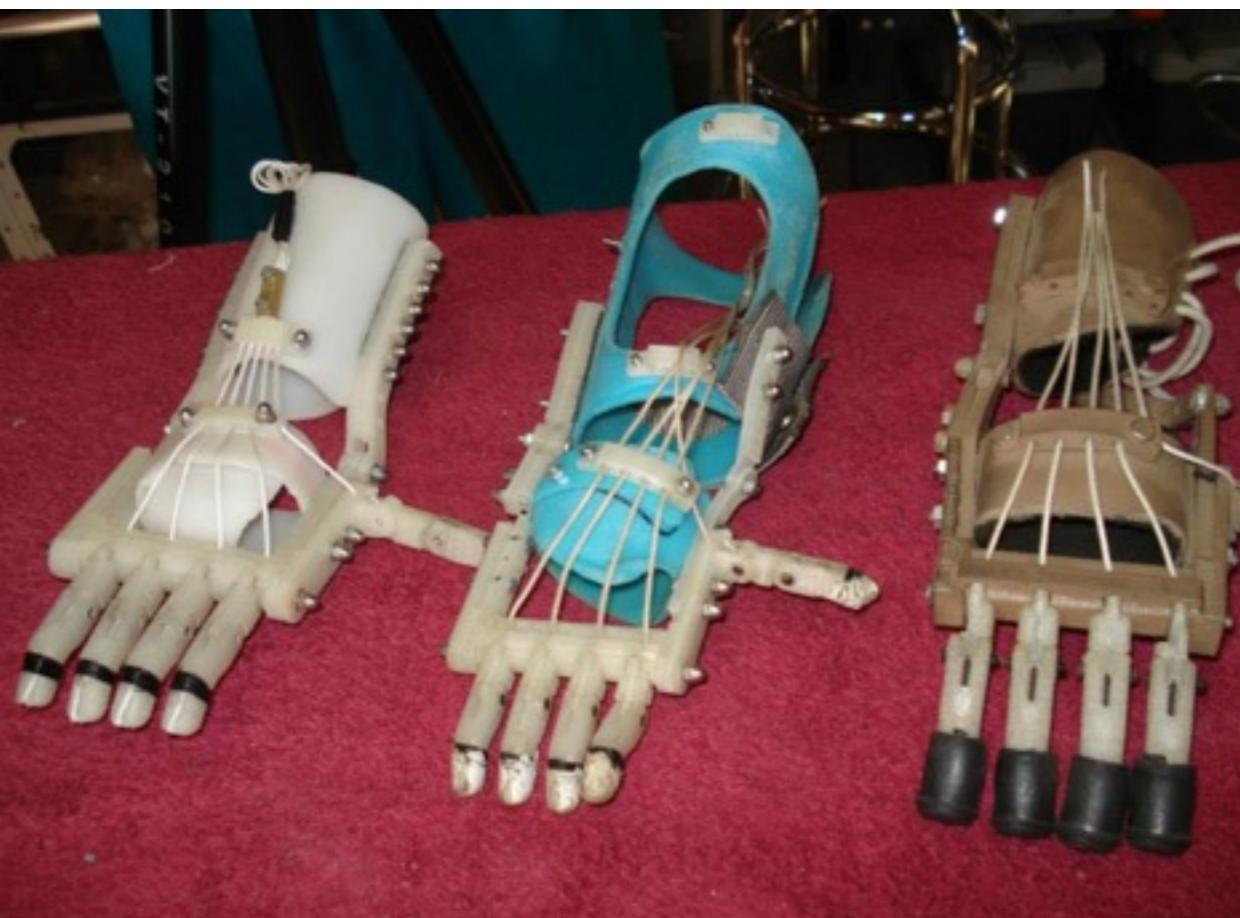
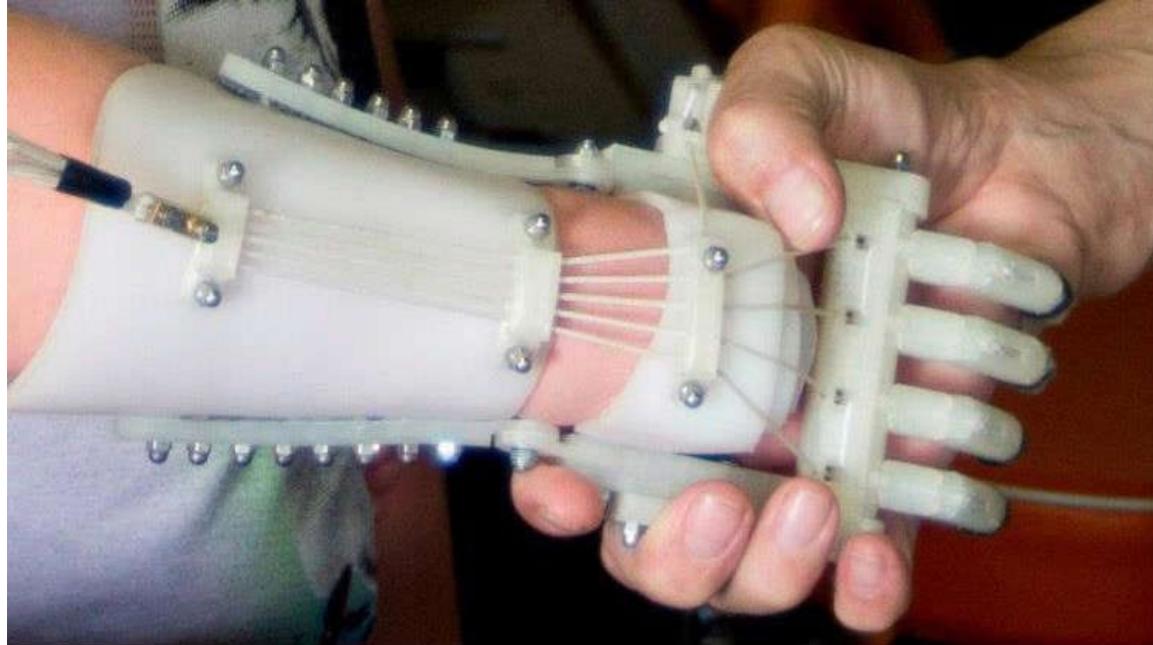
Augmented Human

Finger Reader



<http://www.ahlab.org/project/fingerreader>

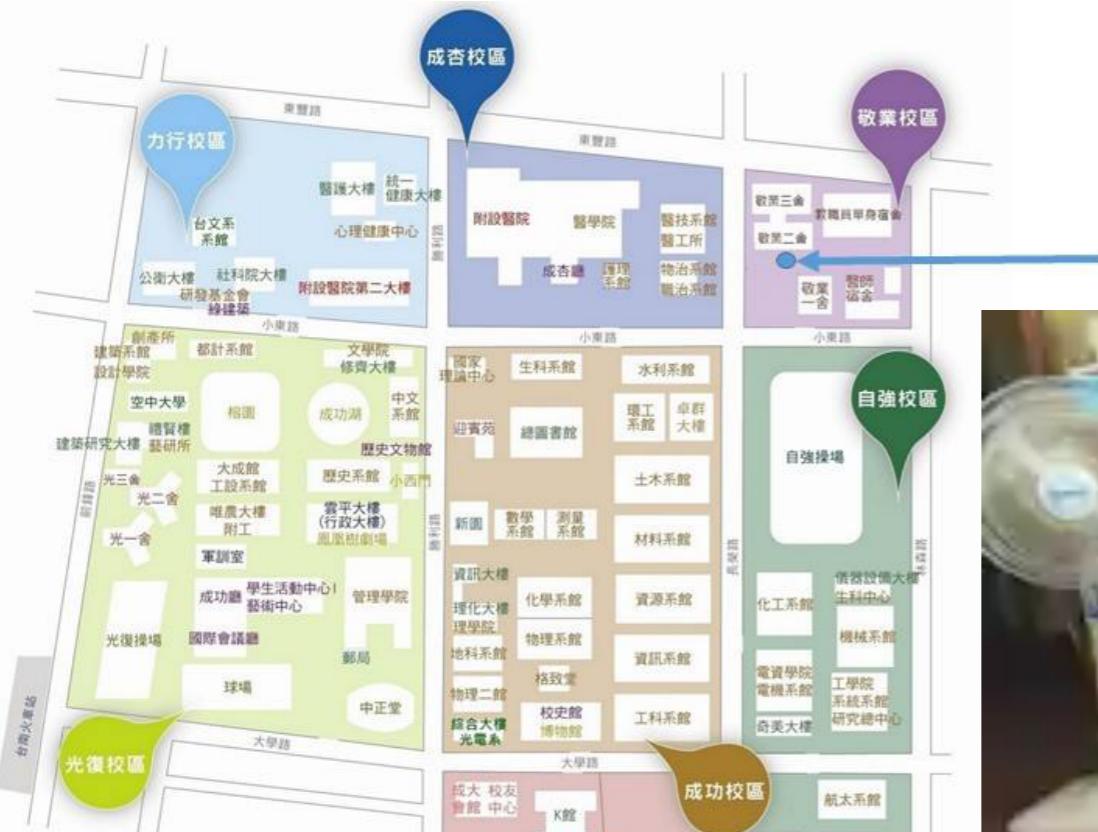
RoboHand 3D-Printed Prosthetic Hands and Fingers



<https://www.indiegogo.com/projects/robohand#/>

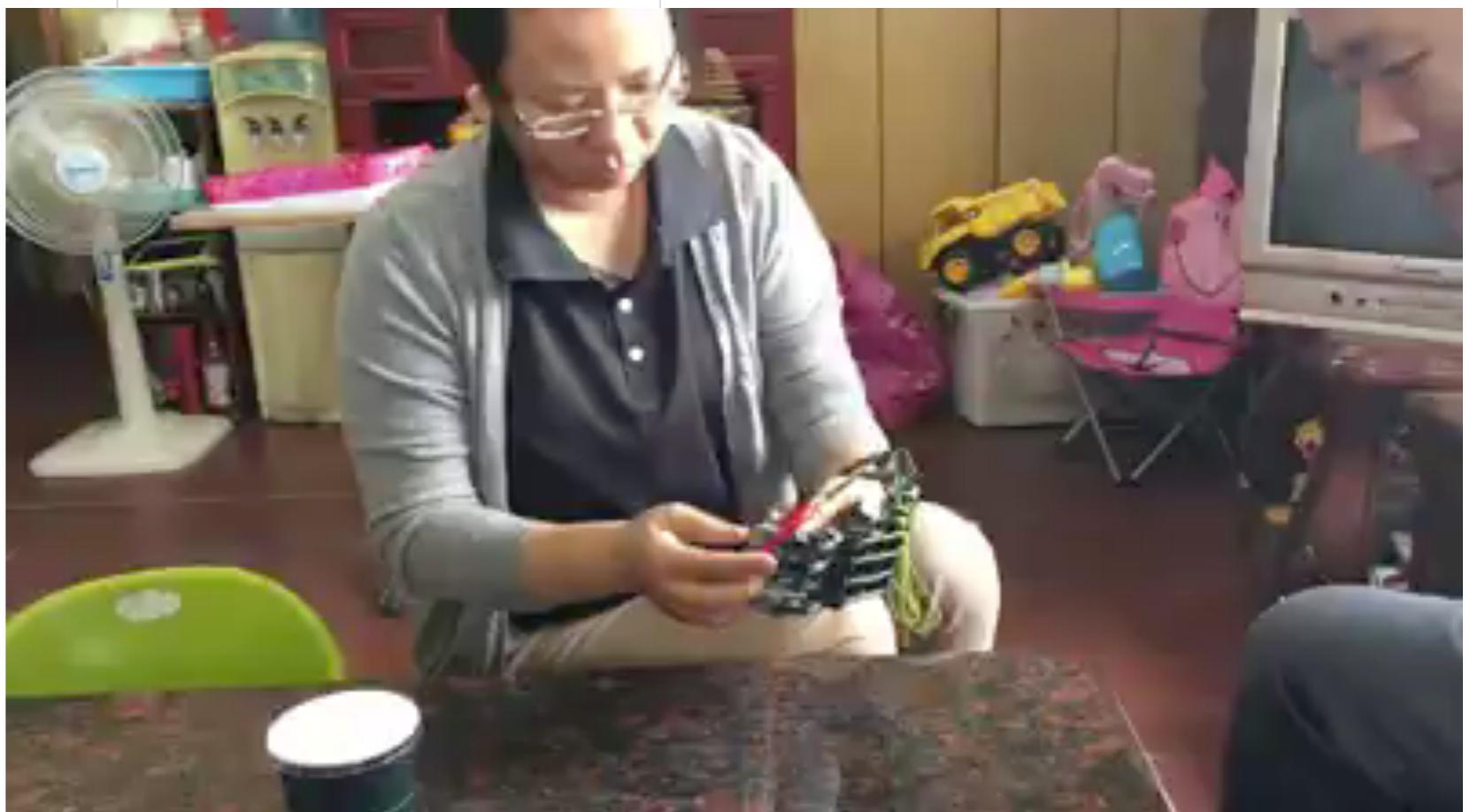


<https://www.facebook.com/groups/1851796288385596/>



MAKER
FACTORY

自造工廠地點：敬業校區敬二舍B1





<http://ai-robot-stsp.tw/event/0317-taiwan-miracle-finger/>

Viktoria Modesta



Anouk Wipprecht Spider Dress



Robotic Arms To Defend Your Personal Space

<https://iq.intel.com/smart-spider-dress-by-dutch-designer-anouk-wipprecht/>

B I O L O G I C

Tangible Media Group, MIT Media Lab
in collaboration with MIT Dept. of Chemical Engineering,
Royal College of Art and *Bacillus Subtilis* Natto cells

<https://tangible.media.mit.edu/project/biologic/>



<https://www.freethink.com/shows/superhuman/season-3/the-worlds-first-bionic-drummer>



Hugh Herr

Finalist, European Inventor Award 2016

<https://www.youtube.com/watch?v=jPkXApA1glk>

AEIOU Framework

A	Activities	What are they doing? e.g. brainstorming, eating, mentoring...
E	Environments	Where is it taking place? e.g. location, noise, lighting, all the senses...
I	Interactions	With whom are they interfacing? e.g. talking, seeing, collaborating...
O	Objects	What are they using? e.g. chair, projector, keyboard...
U	Users	Who are they? e.g. group, individuals, role, demographic data...



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