

AUGMENTED HUMAN LAB

SURANGA NANAYAKKARA
ASSOCIATE PROFESSOR




THE UNIVERSITY OF
AUCKLAND
Te Whare Wānanga o Tāmaki Makaurau
NEW ZEALAND

AUCKLAND
BIOENGINEERING
INSTITUTE



AUGMENTED
HUMAN LAB



NATURAL BEHAVIOUR

TECHNOLOGY



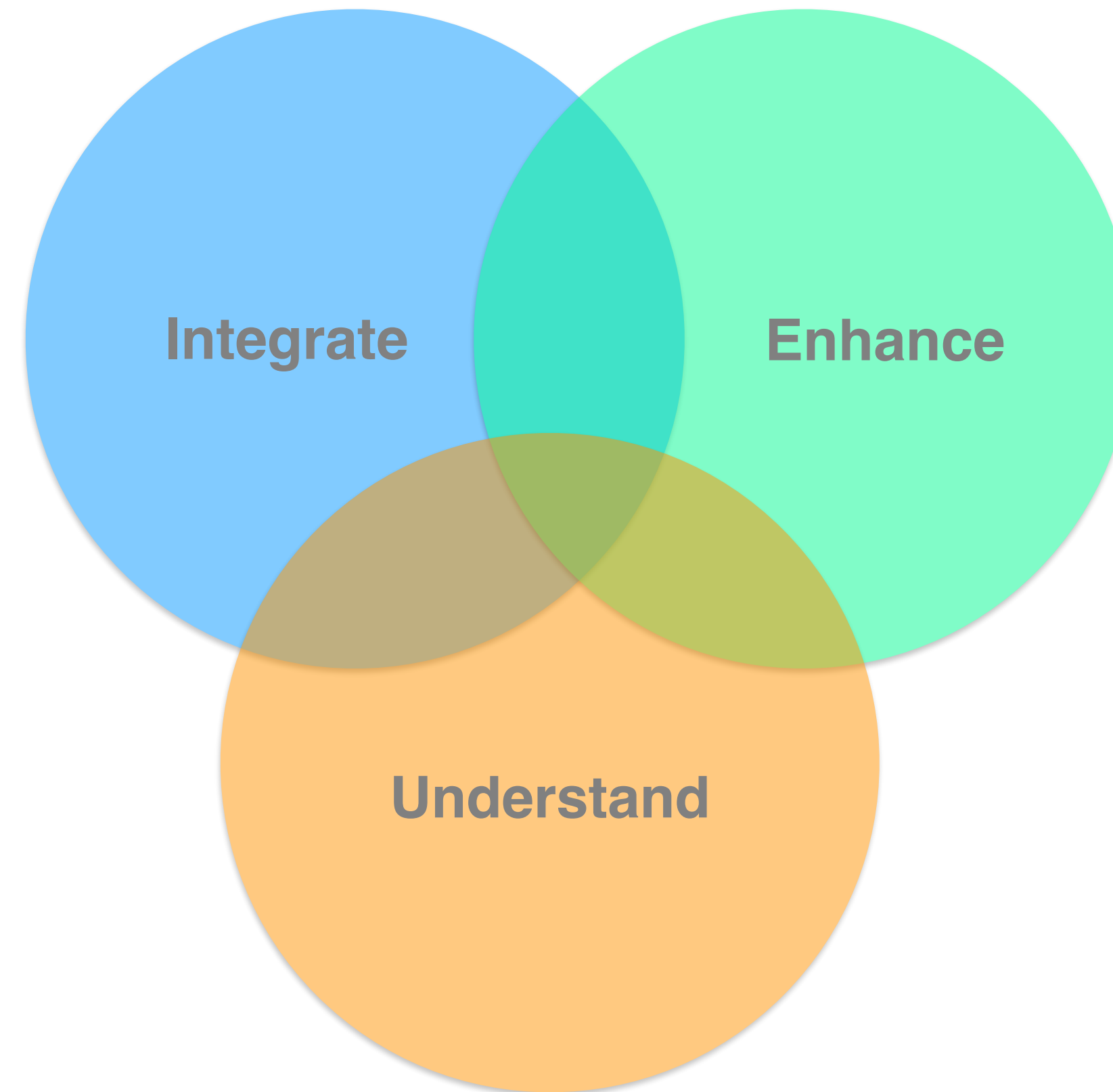
AUGMENTED
HUMAN LAB

ASSISTIVE AUGMENTATIONS

HARNESSING THE FULL POTENTIAL OF TECHNOLOGY
BY DESIGNING INTUITIVE INTERFACES THAT FIT AND
ADAPT TO US INSTEAD OF THE OTHER WAY AROUND

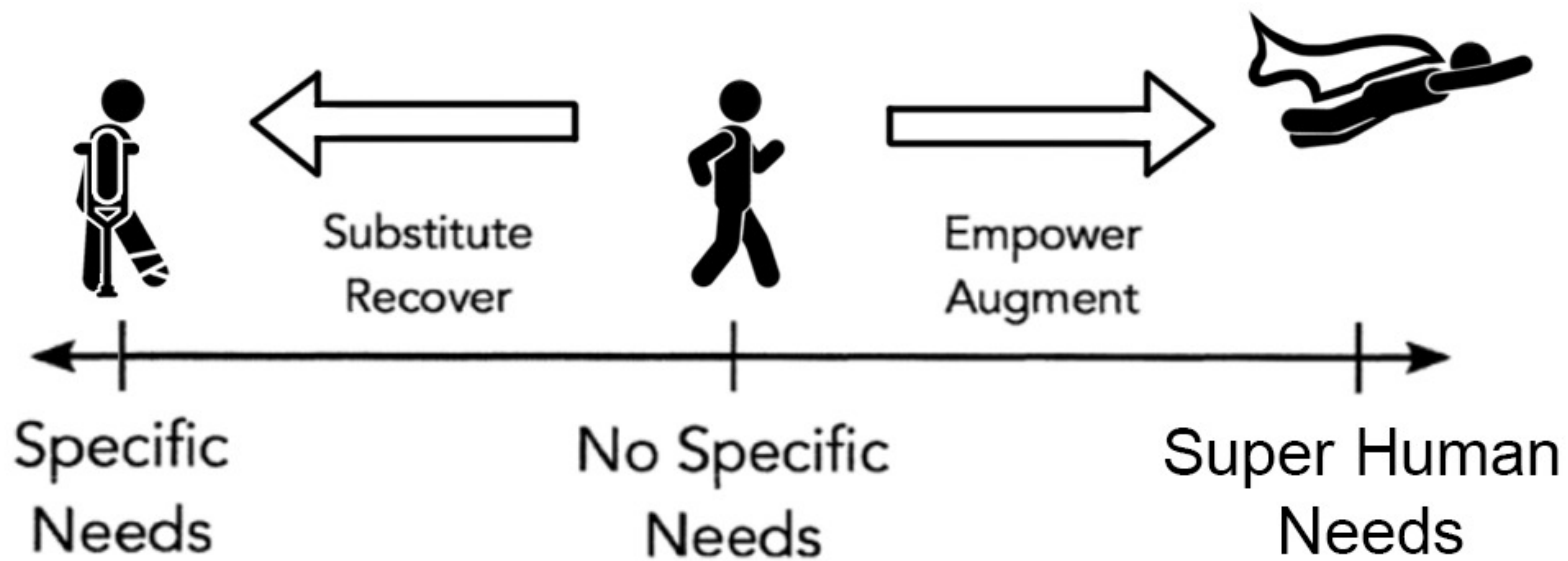
ASSISTIVE AUGMENTATIONS

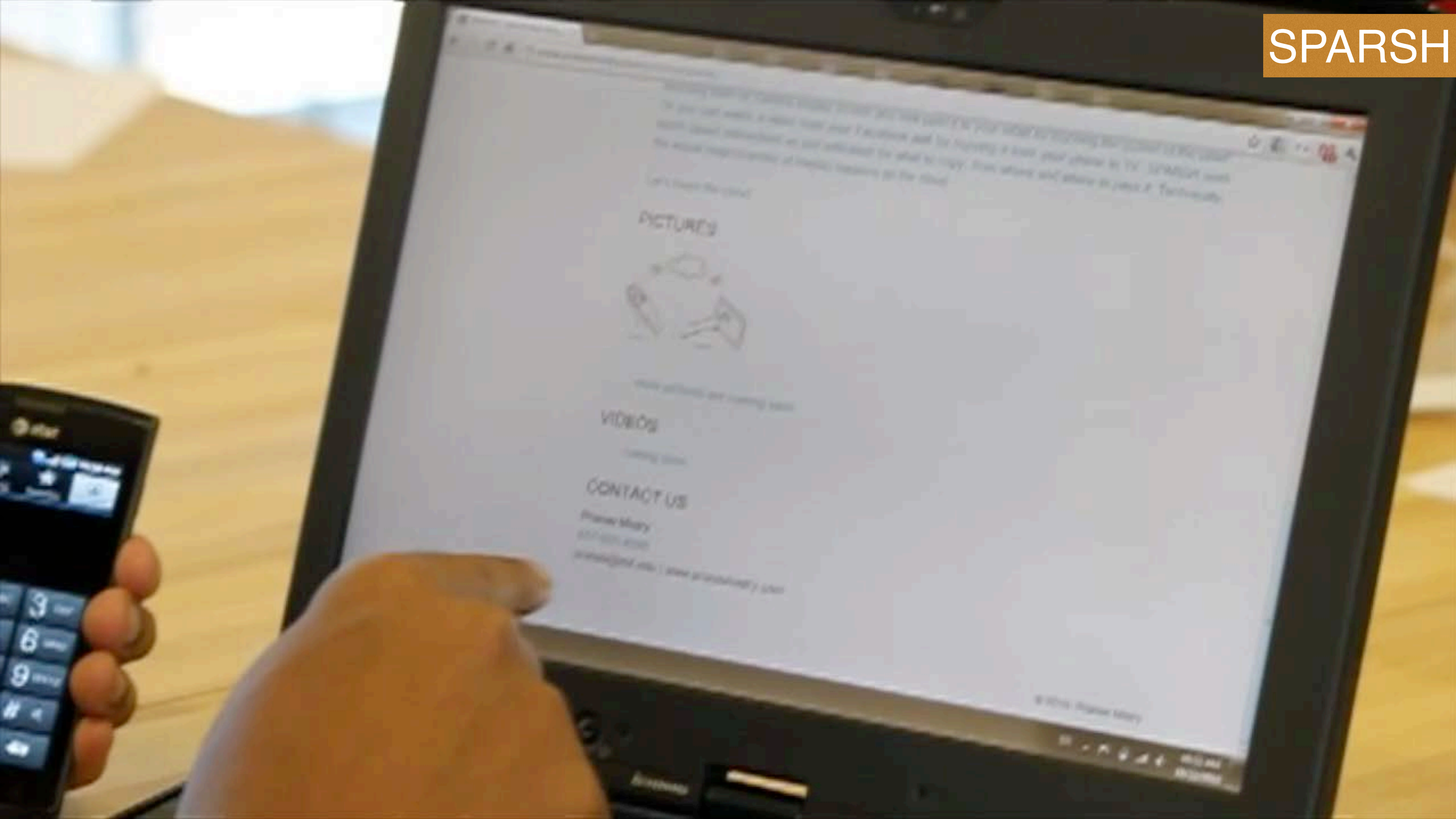
Integrate: Explicitly consider seamless integration with the body or behaviour of the user

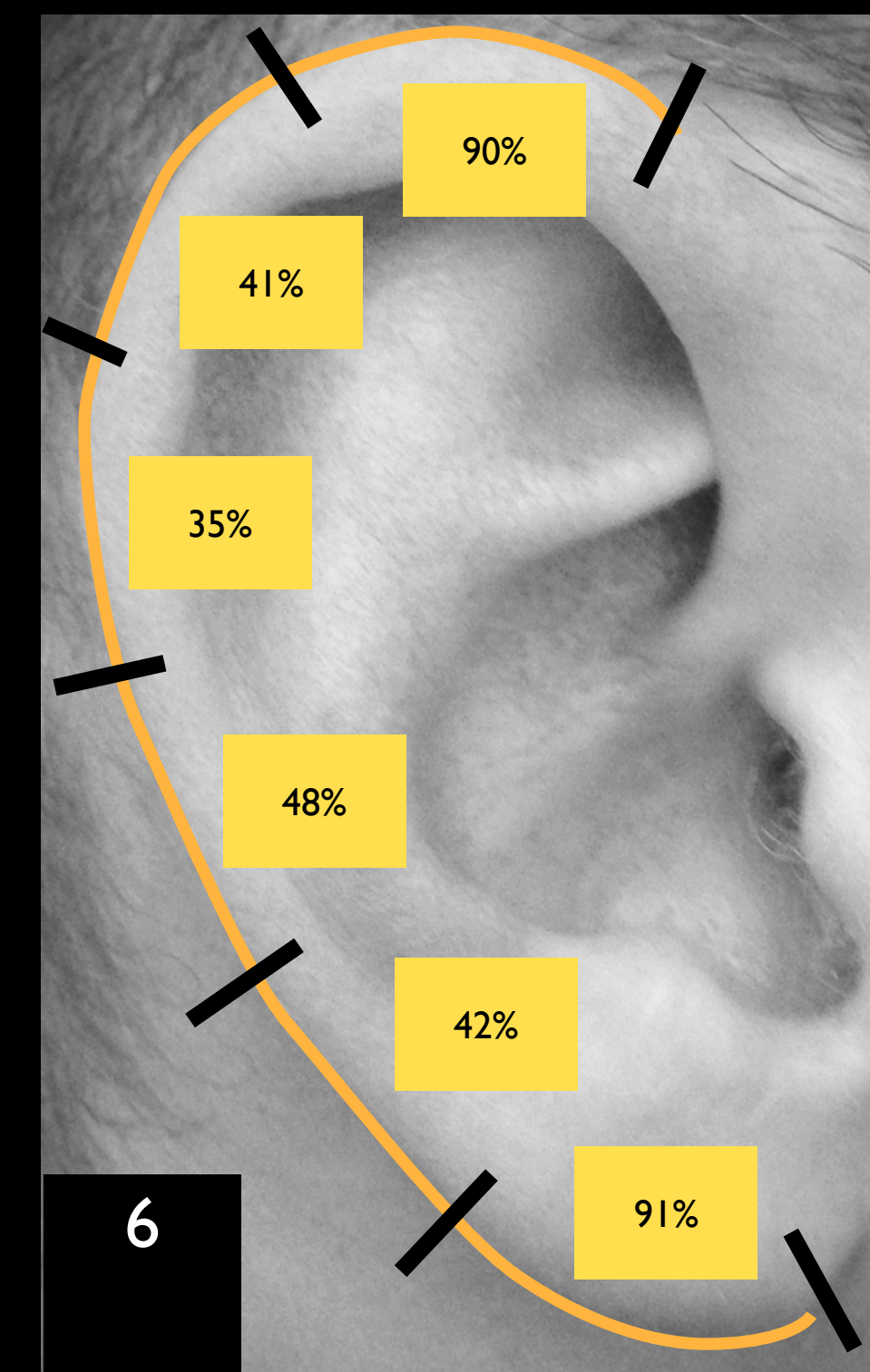
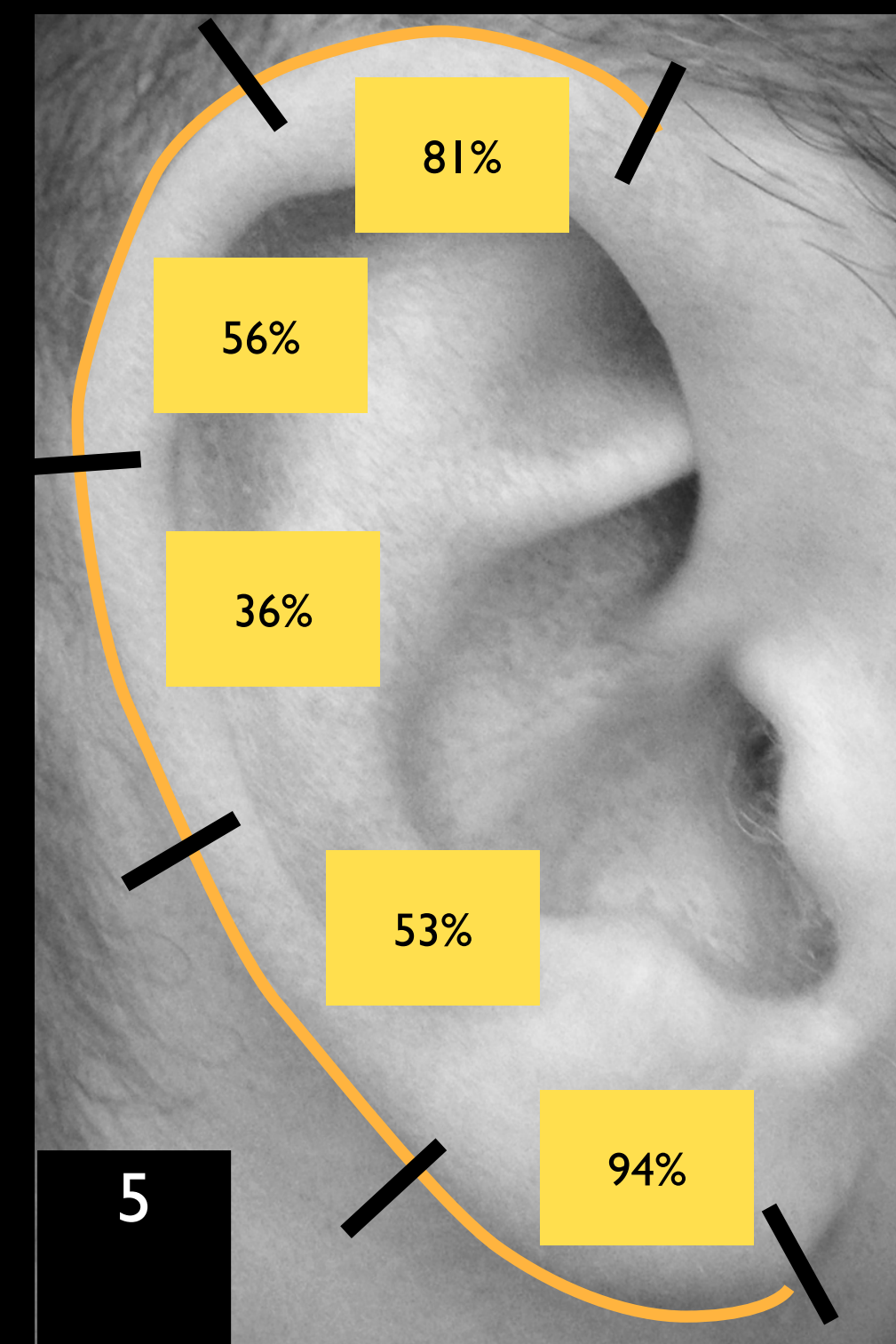
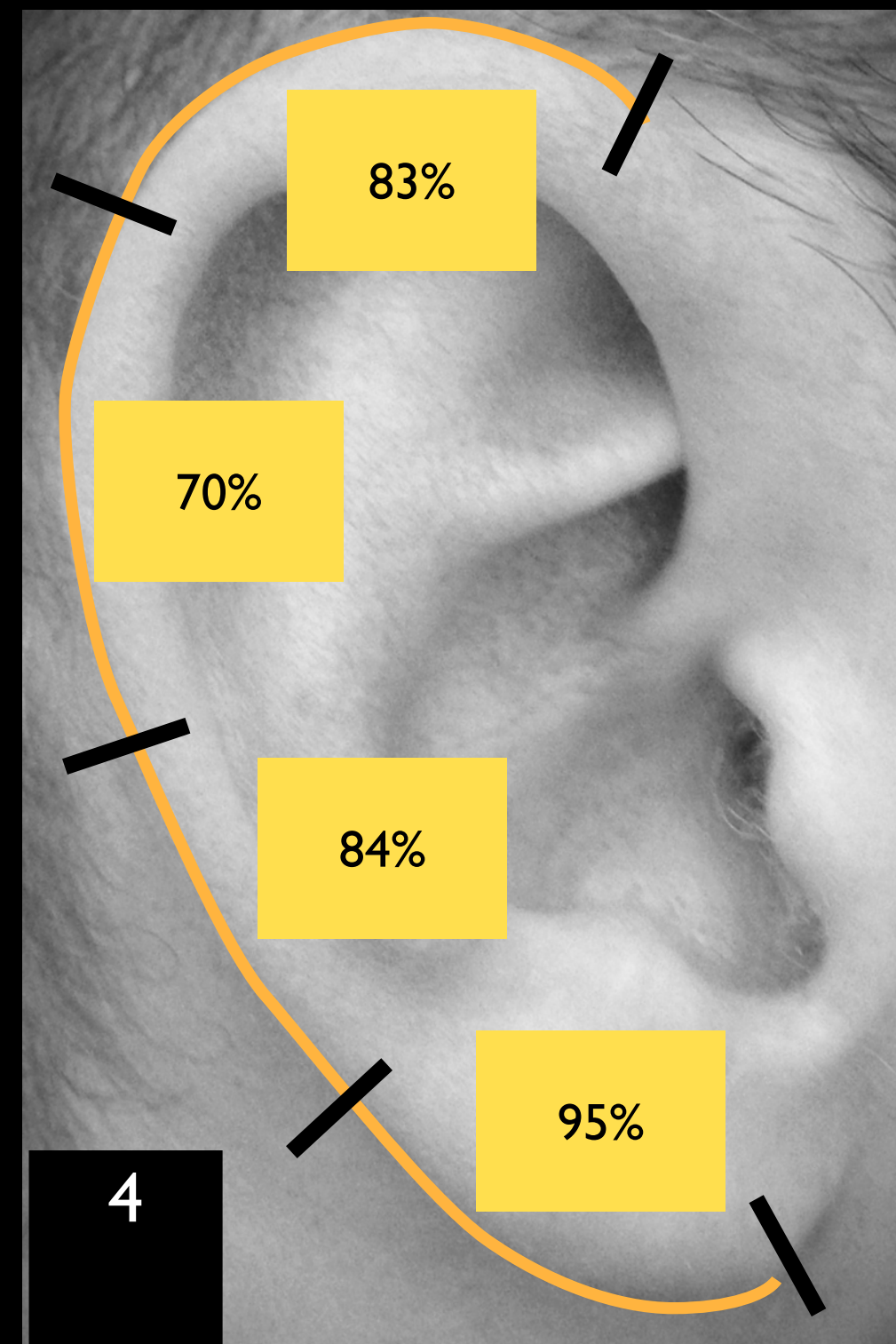
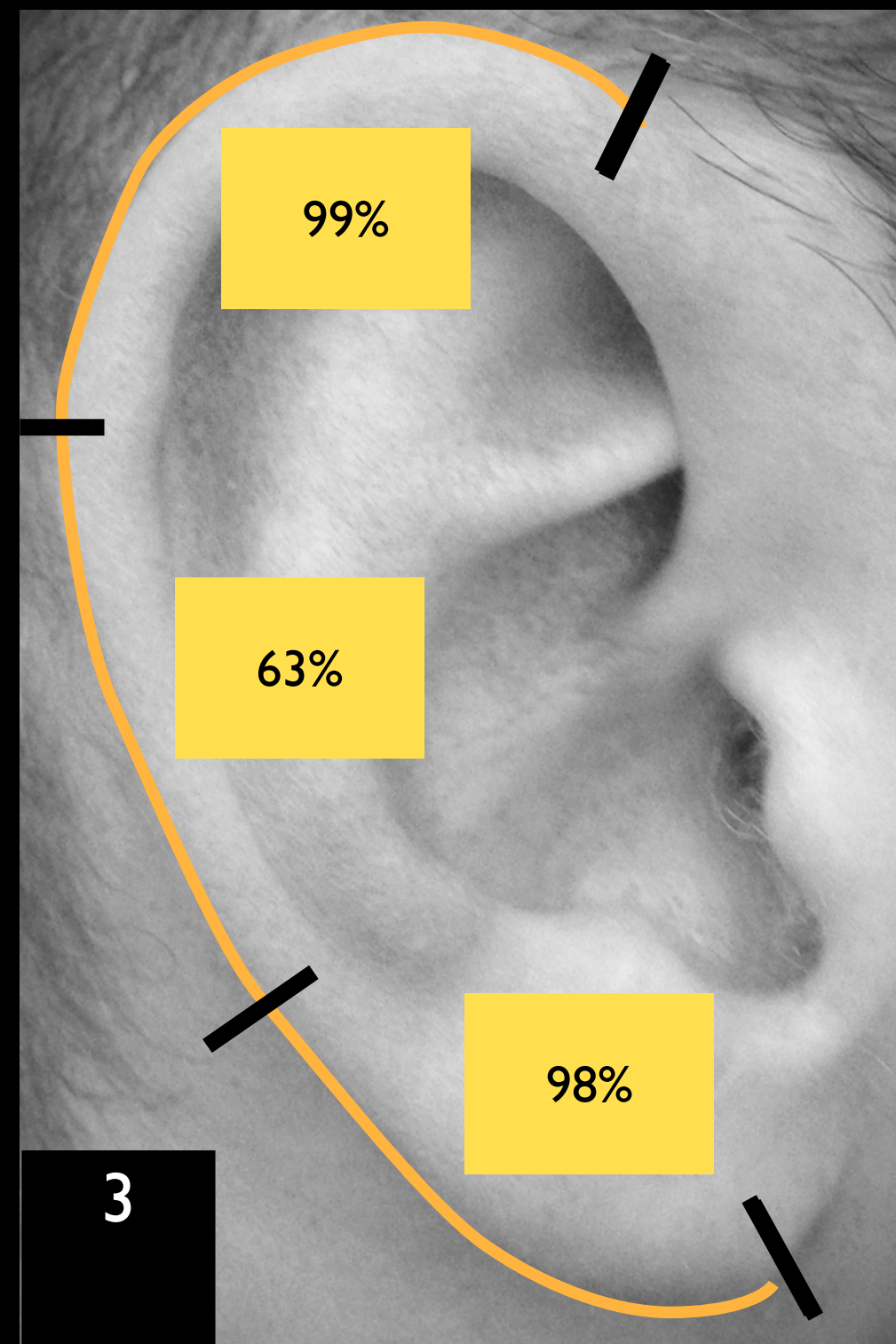
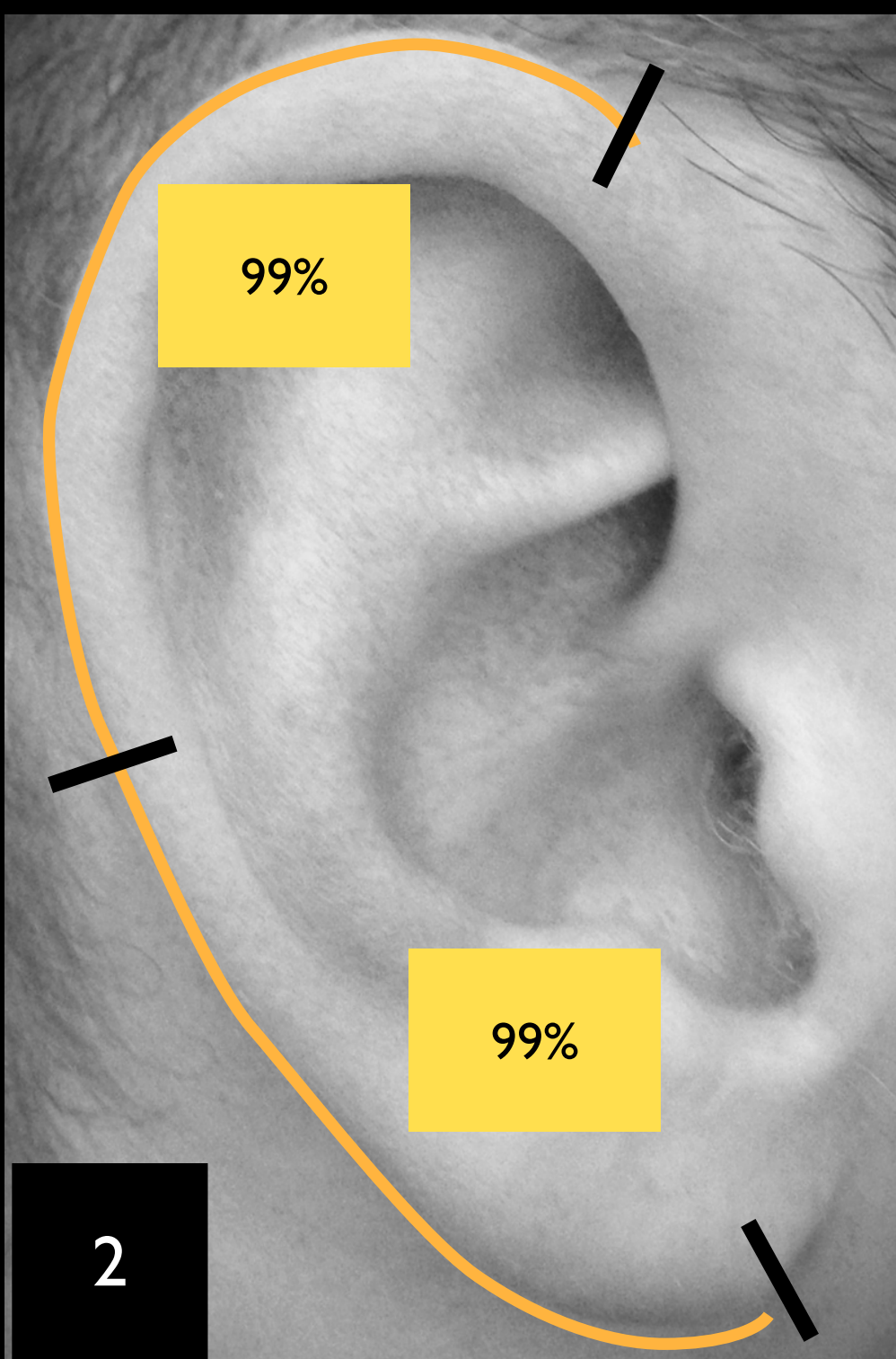


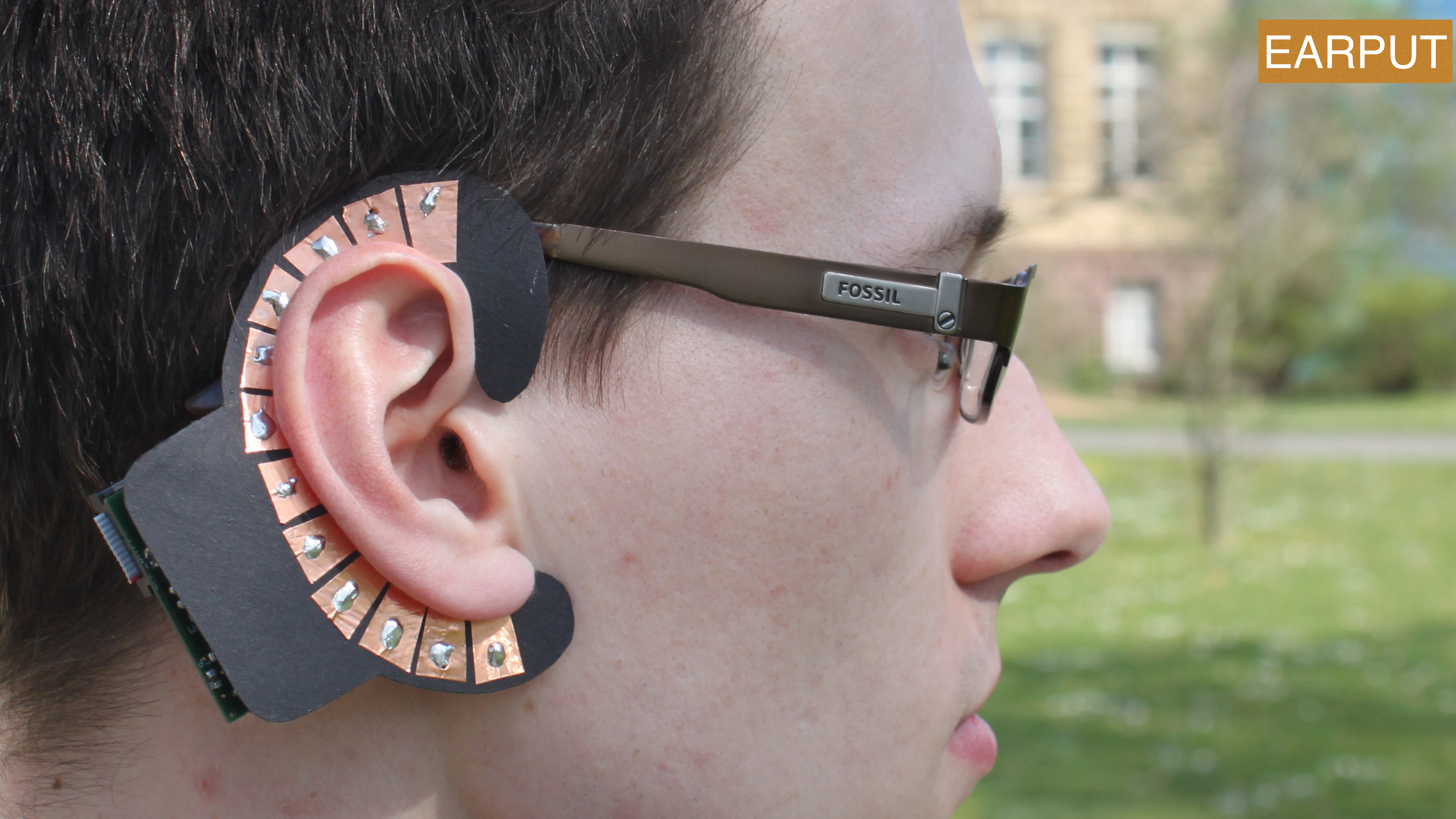
Enhance: Focus on strengthening or extending abilities

Understand: Focus on understanding the intentions, behaviour & physiology of the user

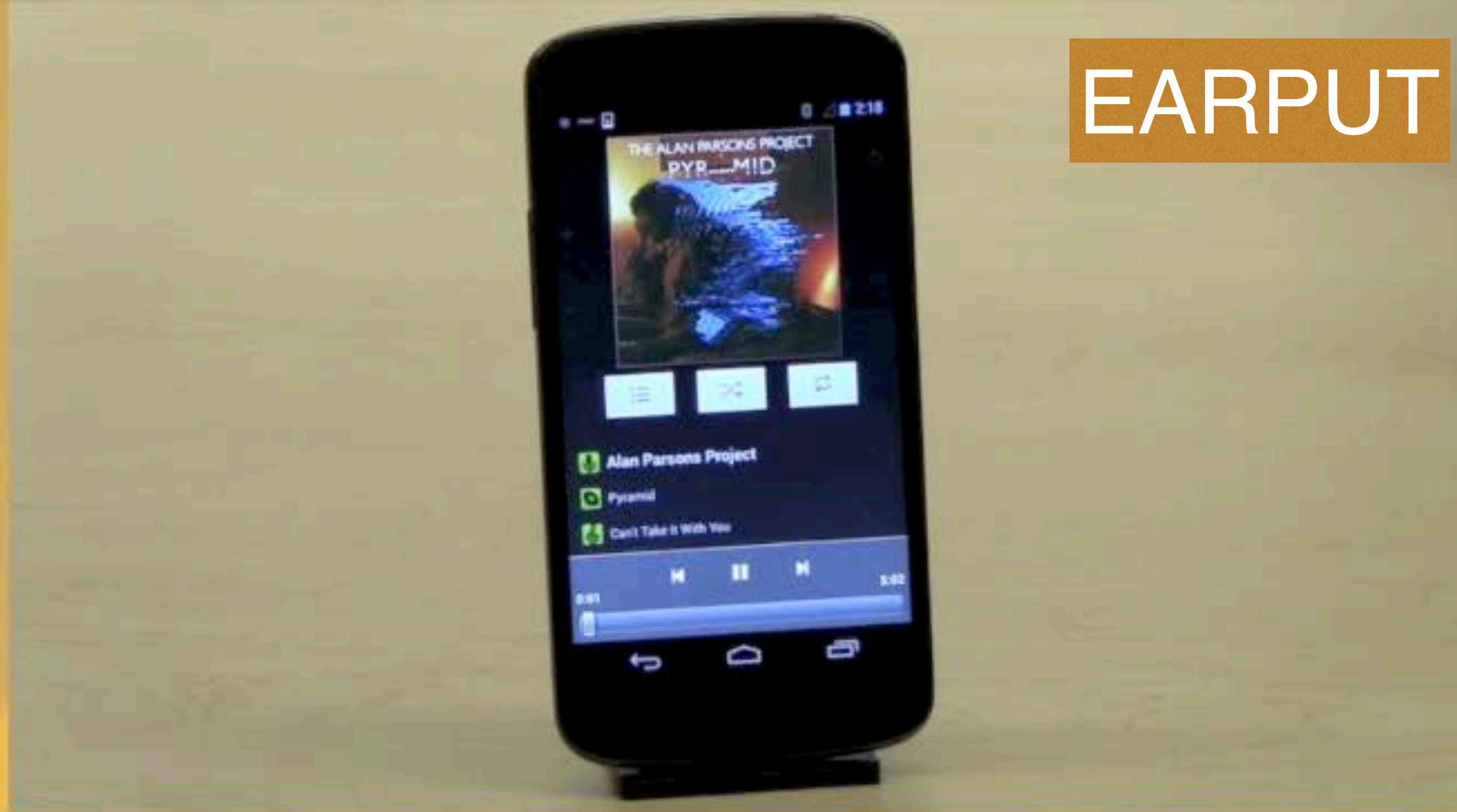
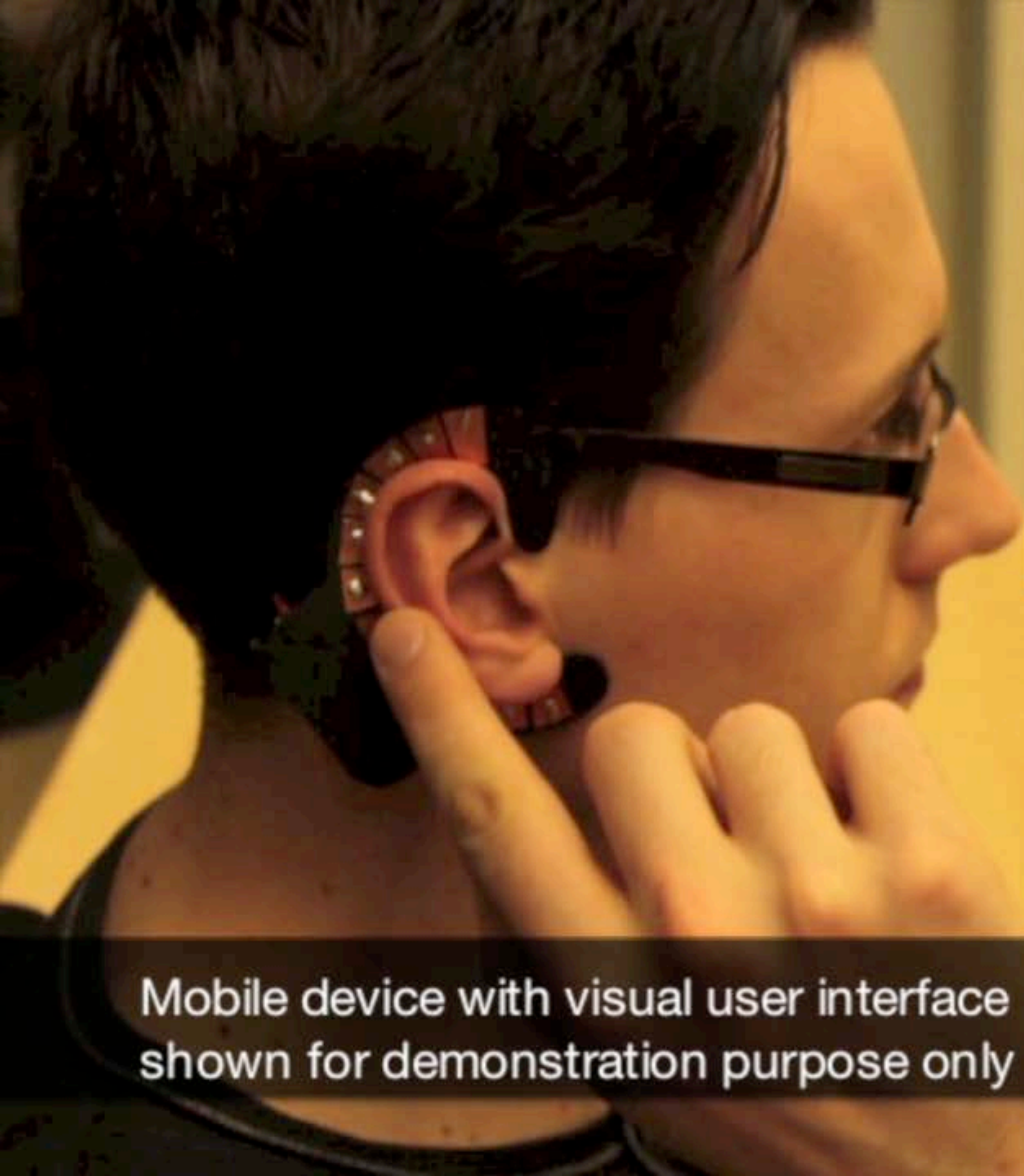








EARPUT



Mobile device with visual user interface
shown for demonstration purpose only





FINGERREADER

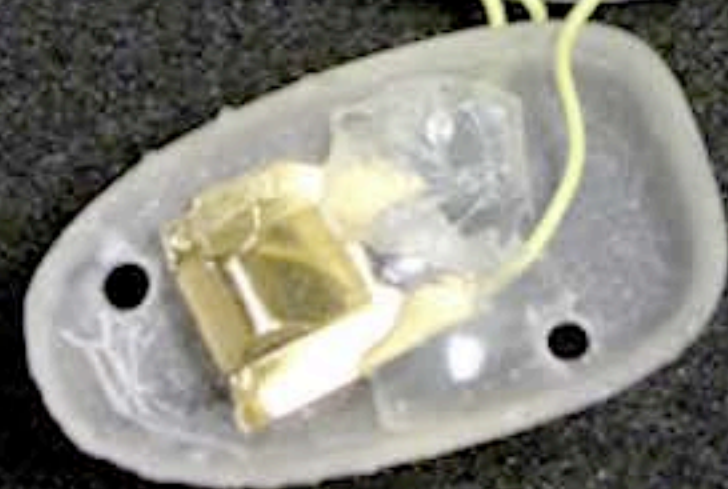
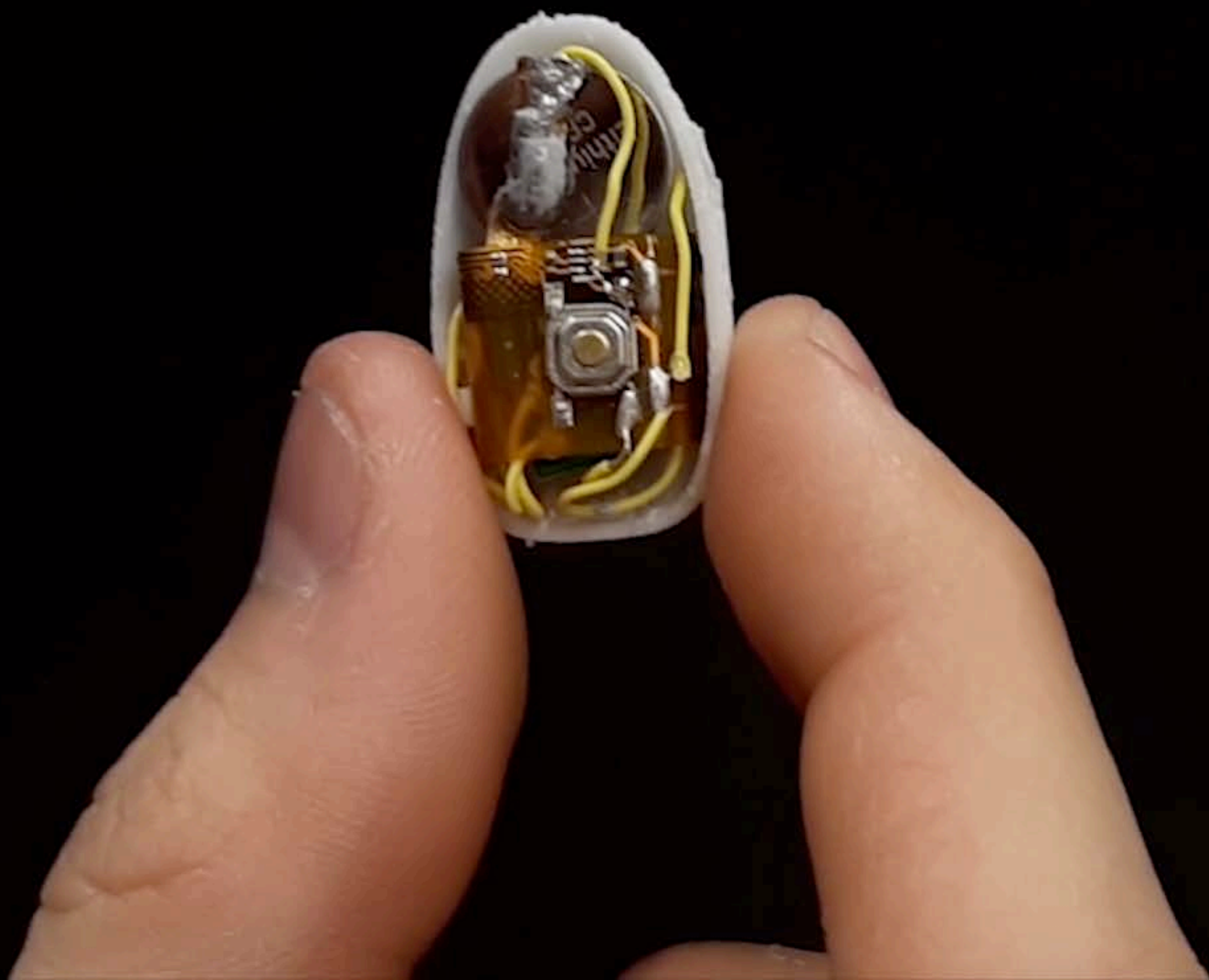












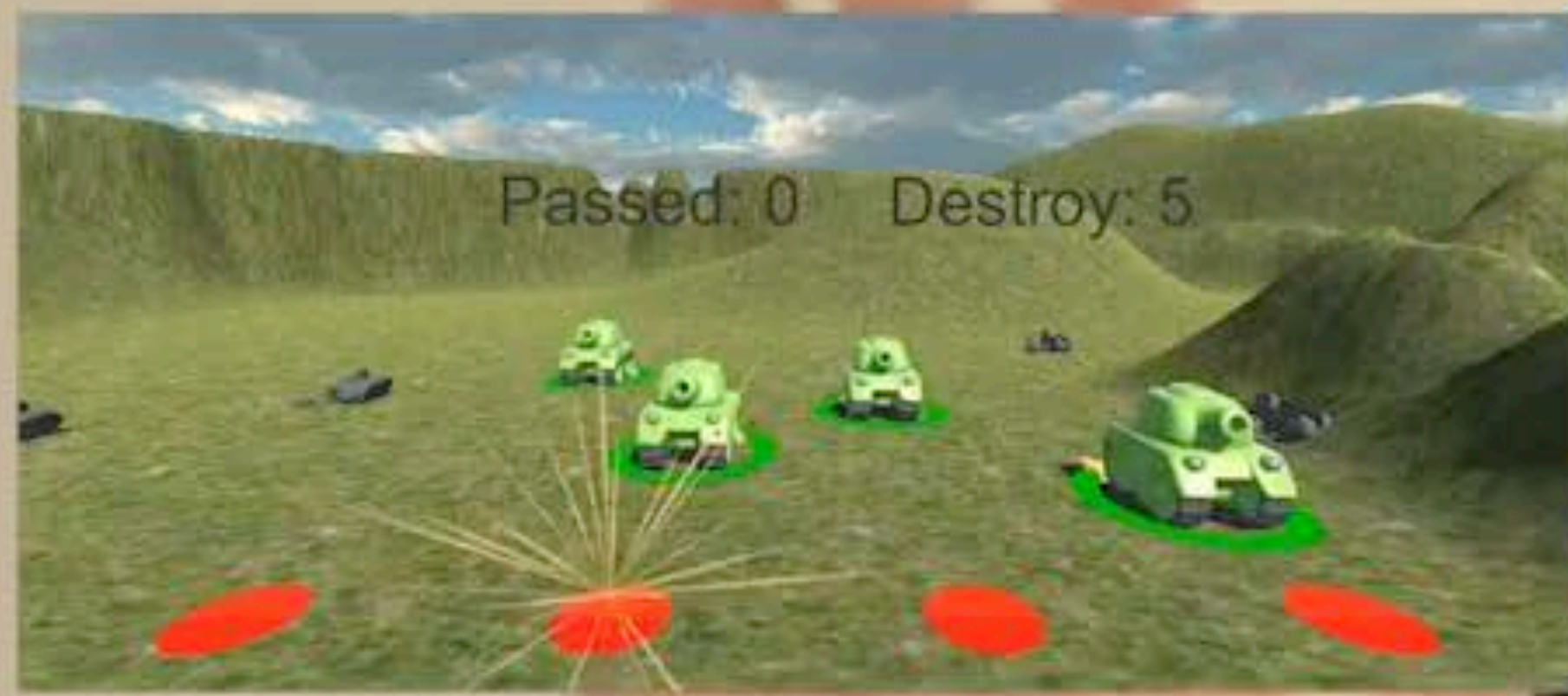
PhantomTouch



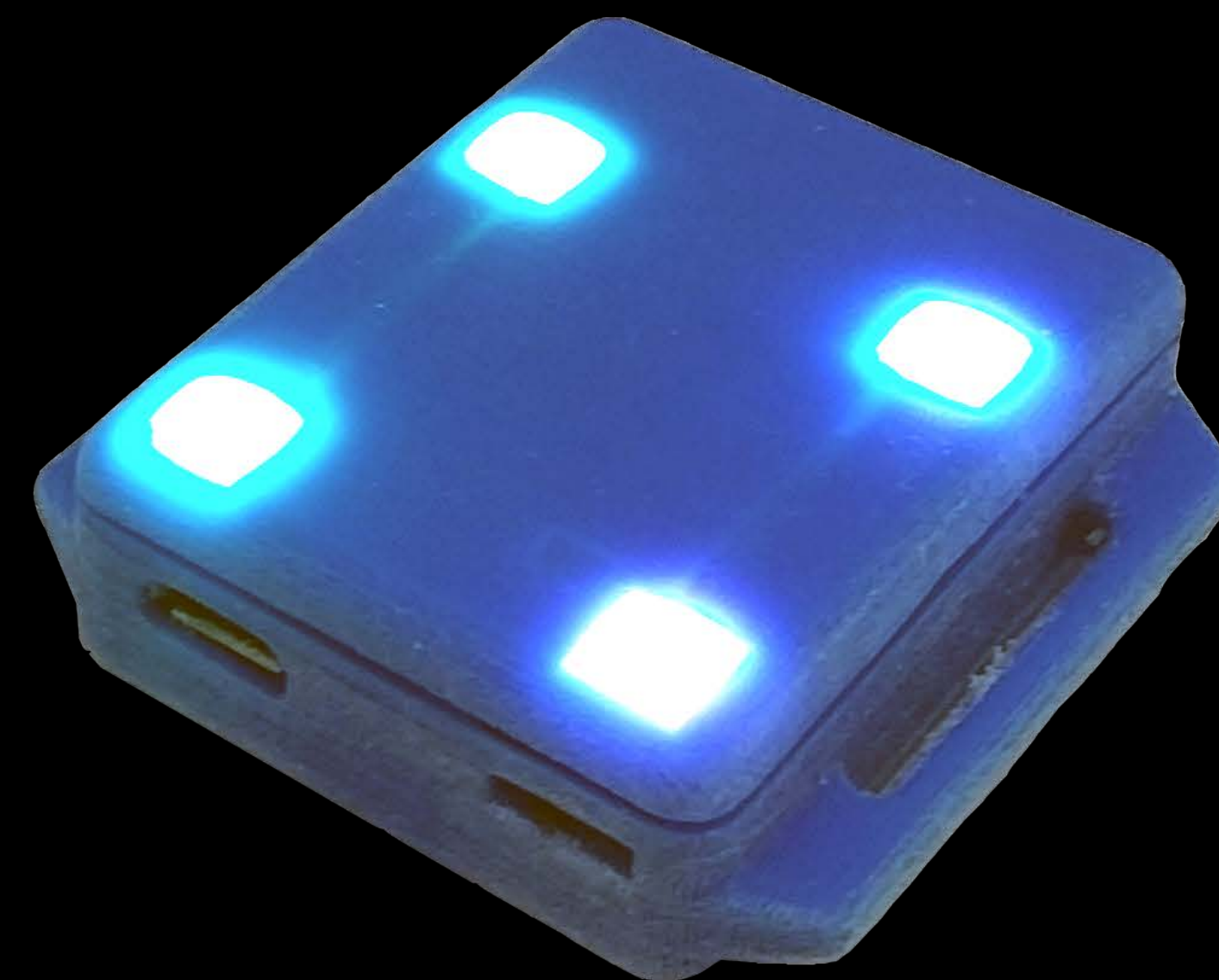
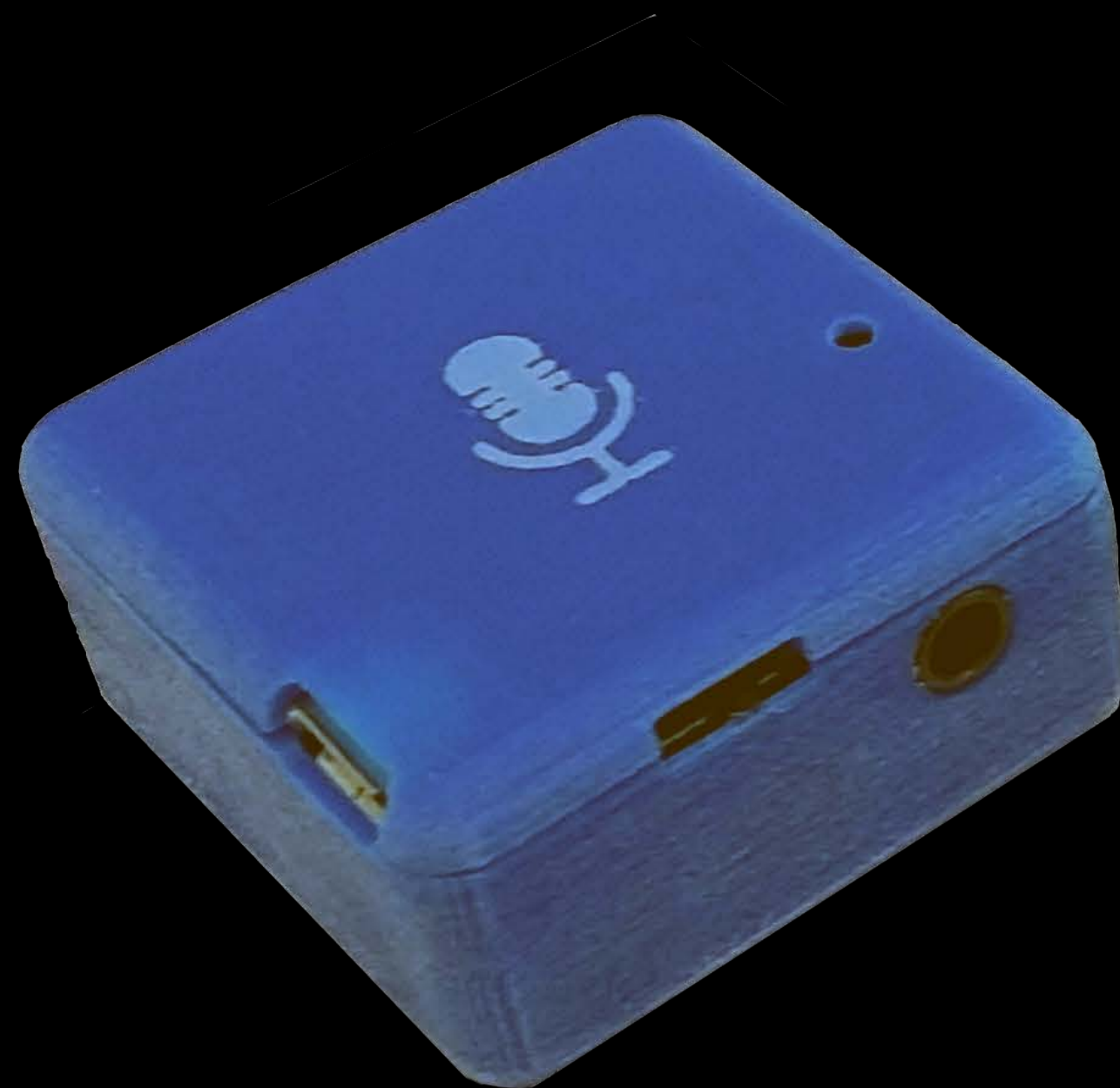


WaveSense





Striking enemy tanks in a virtual reality game using the push gestures







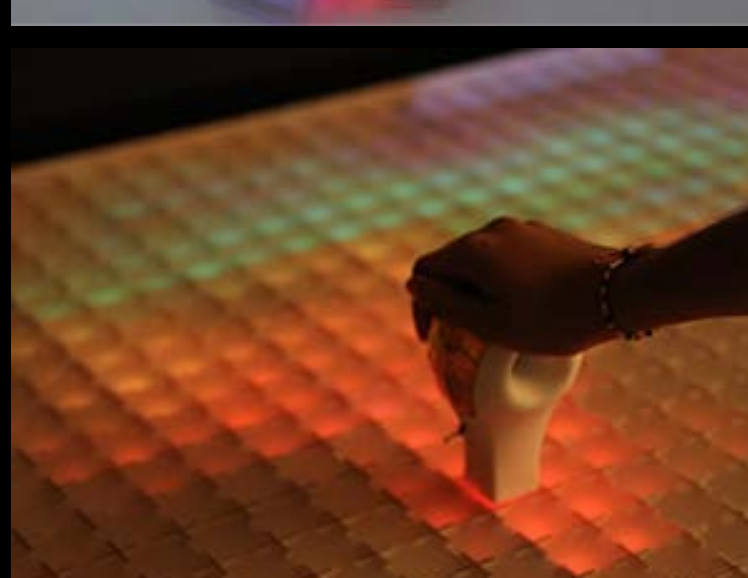
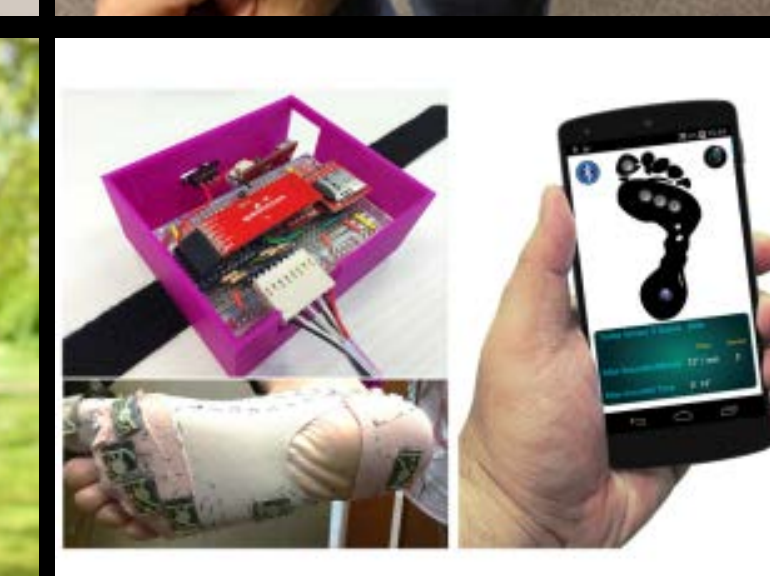
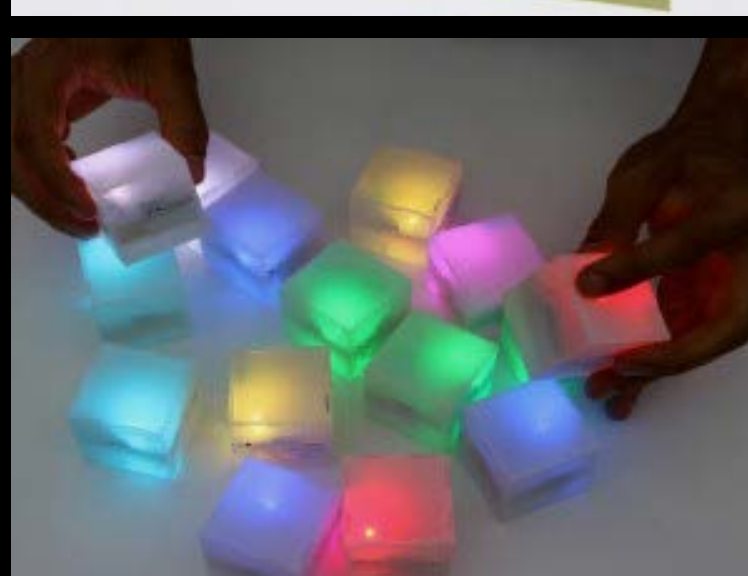
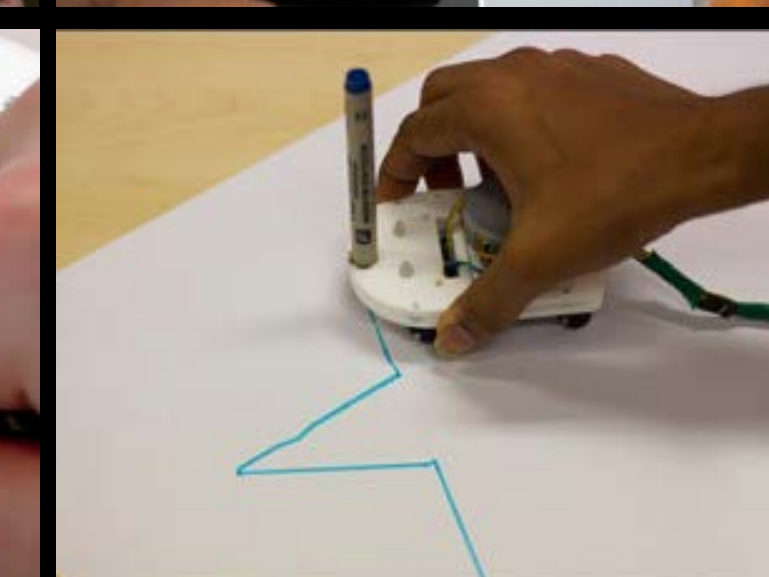
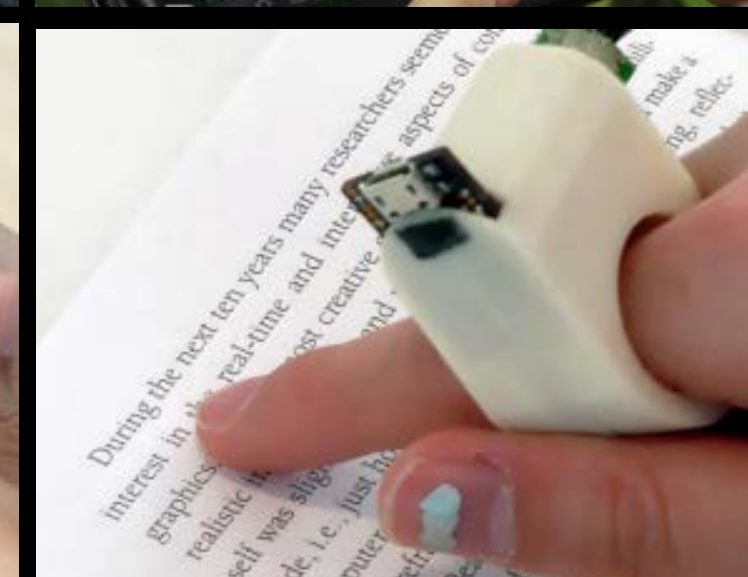
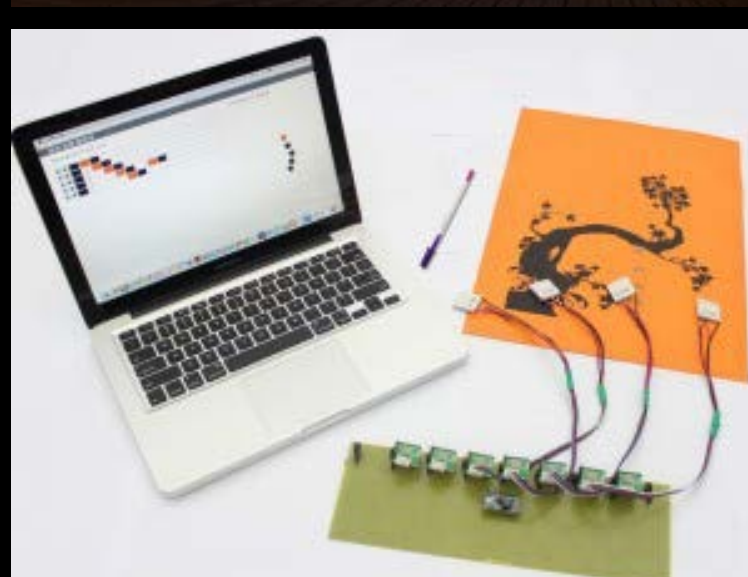
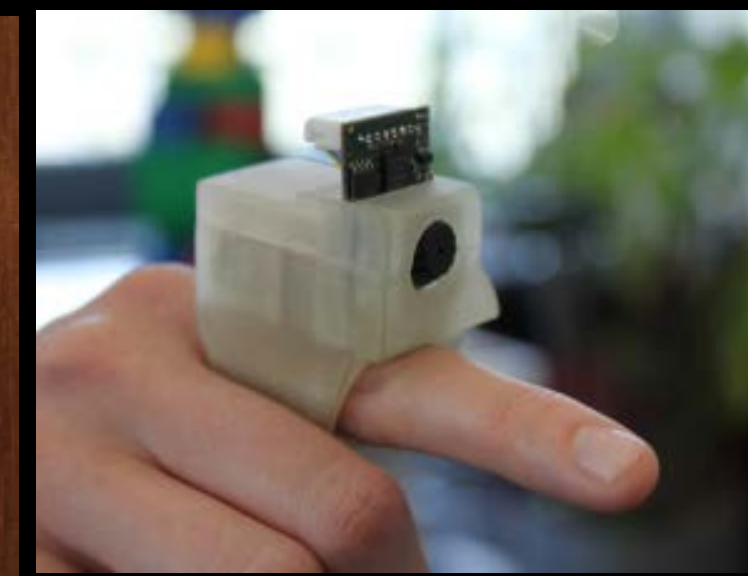




26 March

I wore it driving today. It made driving so much more enjoyable.

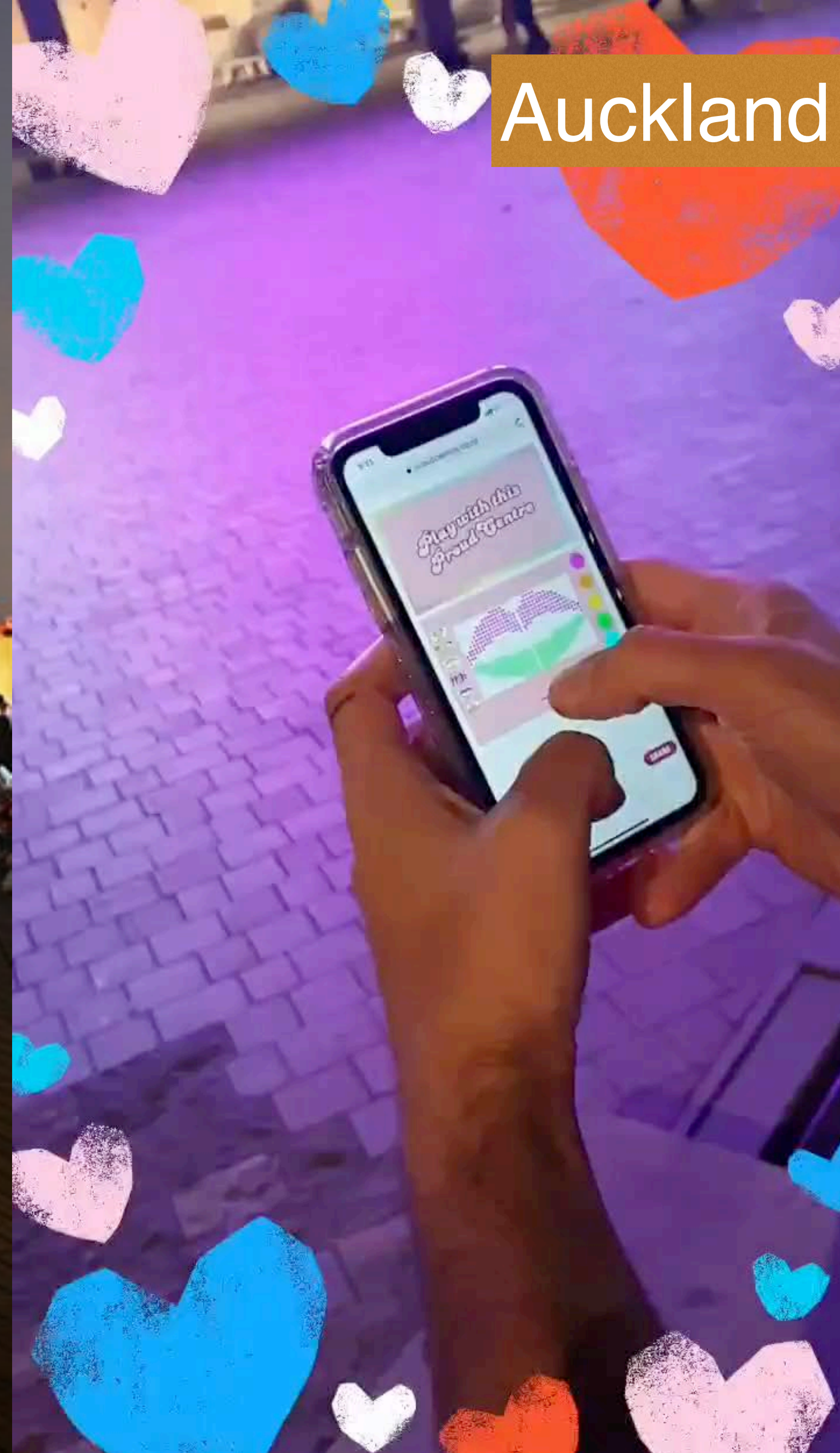
Should've seen me, I was really dancing in the car - probably out of beat lol but I didn't care.



Singapore



Auckland

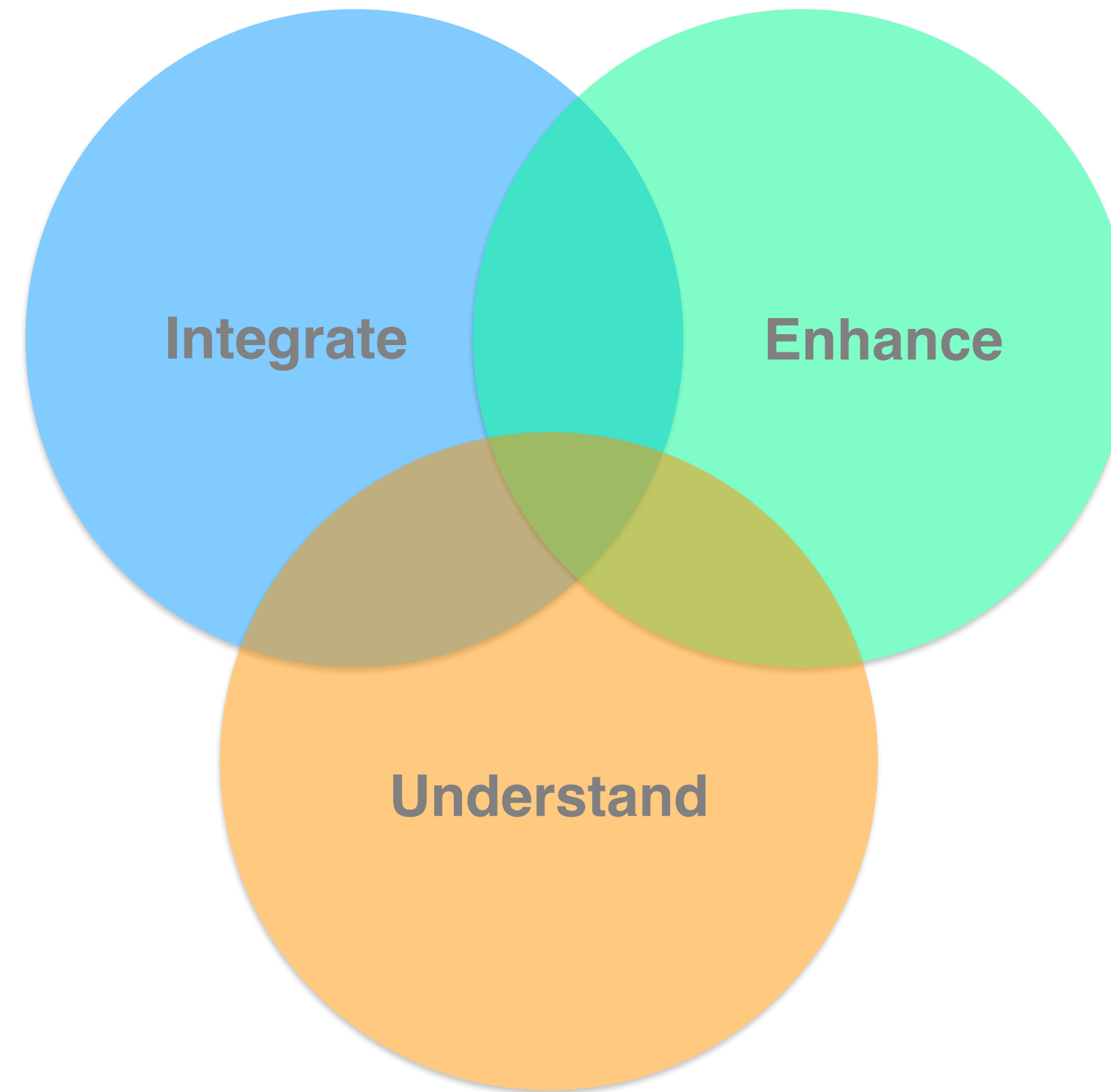


ASSISTIVE AUGMENTATIONS

HARNESSING THE FULL POTENTIAL OF TECHNOLOGY BY
DESIGNING INTUITIVE INTERFACES THAT FIT AND ADAPT TO US
INSTEAD OF THE OTHER WAY AROUND

ASSISTIVE AUGMENTATIONS

Integrate: Explicitly consider seamless integration with the body or behaviour of the user



Enhance: Focus on strengthening or extending abilities

Understand: Focus on understanding the intentions, behaviour & physiology of the user





WWW.AHLAB.ORG



AUGMENTED
HUMAN LAB



THE UNIVERSITY OF
AUCKLAND
Te Whare Wānanga o Tāmaki Makaurau
NEW ZEALAND

AUCKLAND
BIOENGINEERING
INSTITUTE