IEEE VGTC Virtual Reality

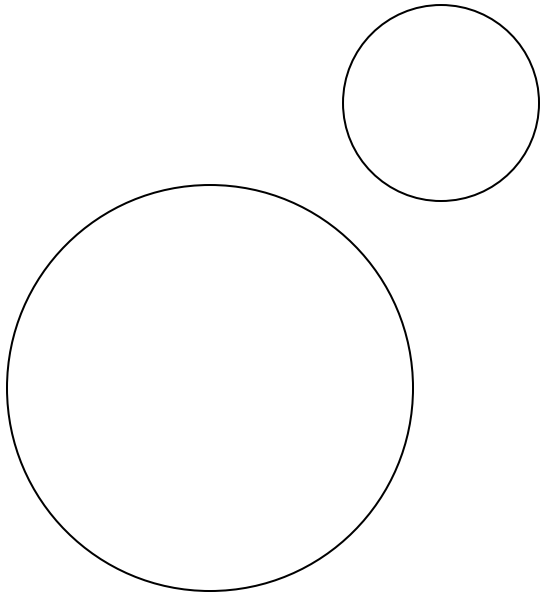
Significant New Researcher Award Winner

Pedro Lopes

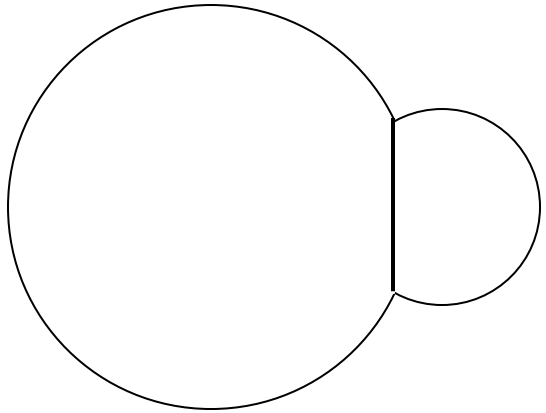
University of Chicago, USA

In recognition of his outstanding contributions to virtual reality, wearable hardware for multimodal sensations (e.g., haptics, olfaction, taste), and the study of perceptual illusions

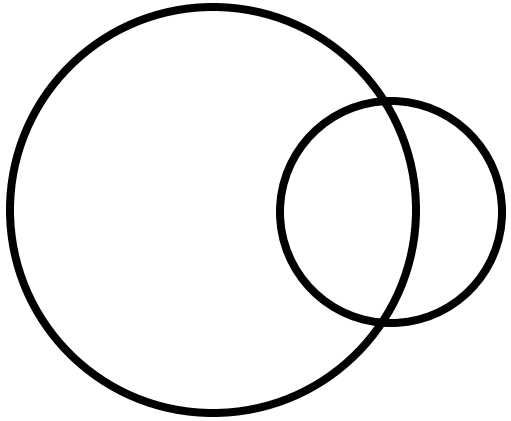
More on his work: **lab.plopes.org**



mobile



wearable



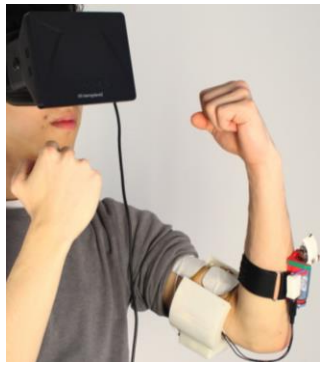
integrated
with body

integrating devices directly with the user's body enables:

1. body as **force actuator**

VR Walls CHI'17

Magnetic Muscle Stimulation UIST'23



Impacto UIST'15

Hands-free force-feedback CHI'18

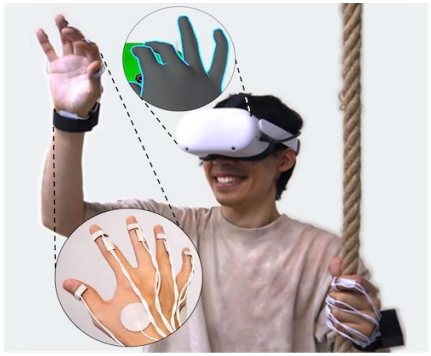
(...)

2. body as **thermal device**

Trigeminal Temperature CHI'20 Best Paper

3. body as **tactile actuator**

Chemical Haptics UIST'21



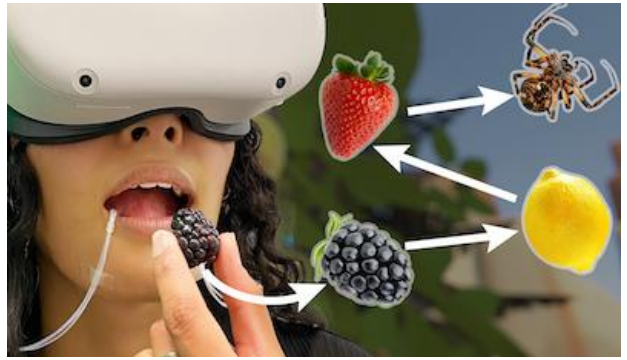
Back-of-Hand CHI'23 Best Paper

Haptic Permeability CHI'24

Source Effector CHI'24 Honorable Mention

(...)

4. body as **taste display**



Taste Retargeting UIST'23

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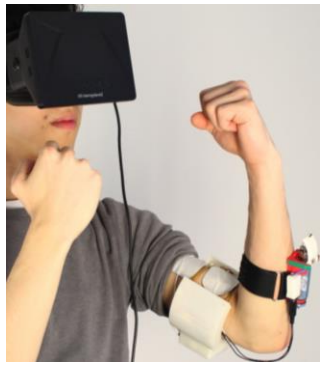

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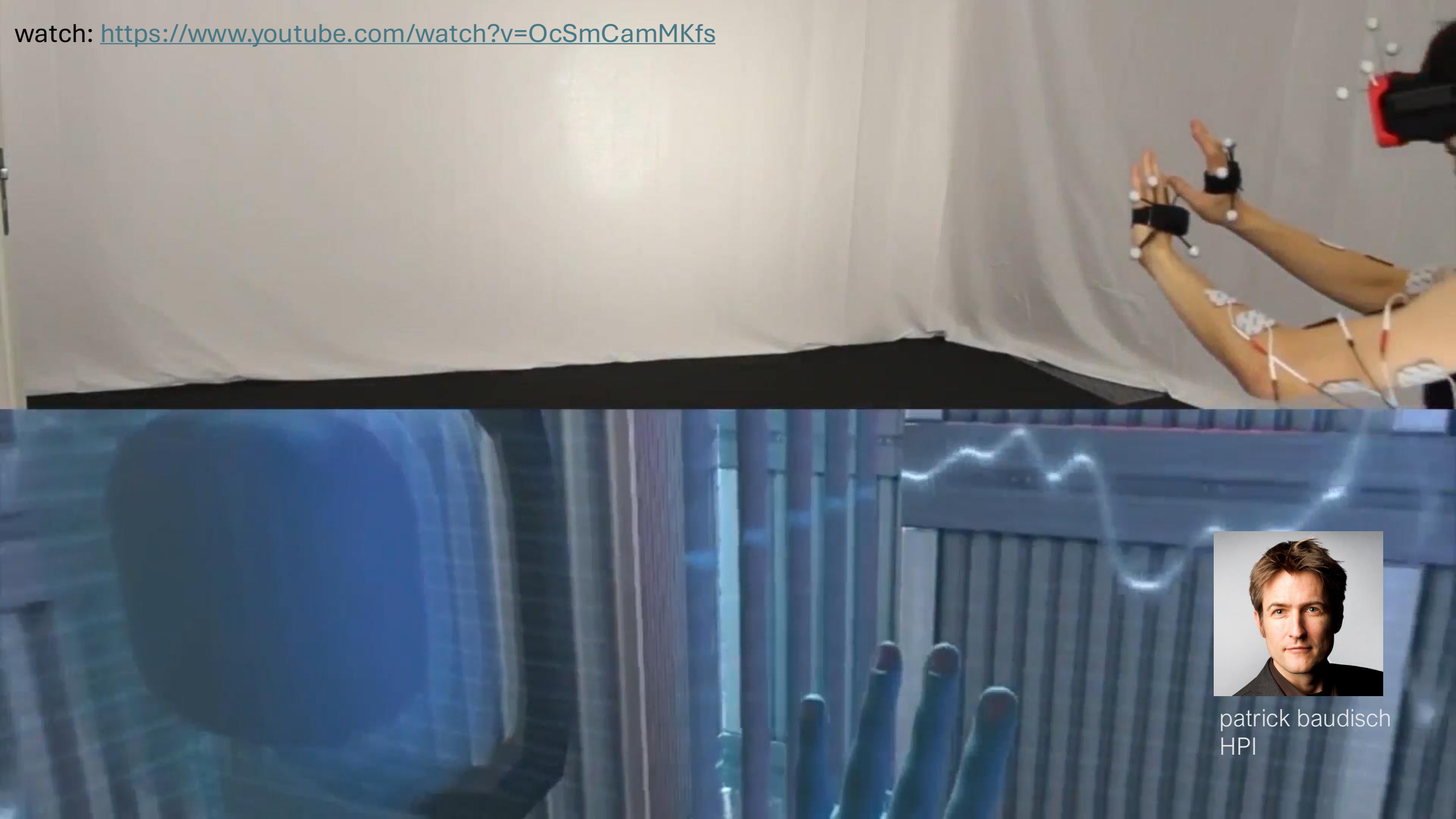
Taste Retargeting UIST'23

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



patrick baudisch
HPI

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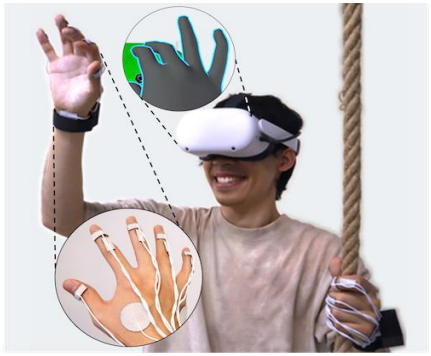

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Honorable Mention

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Taste Retargeting UIST'23

yudai tanaka
UChicago

watch: https://www.youtube.com/watch?v=-Y61l38F81s

transcranial
magnetic stimulation

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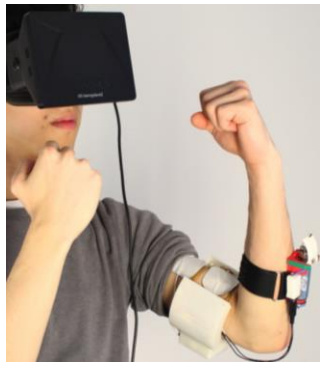
VR Walls CHI'17

Magnetic Muscle Stimulation UIST'23



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thanks VR community and

let's continue to **expand all the body senses in VR**

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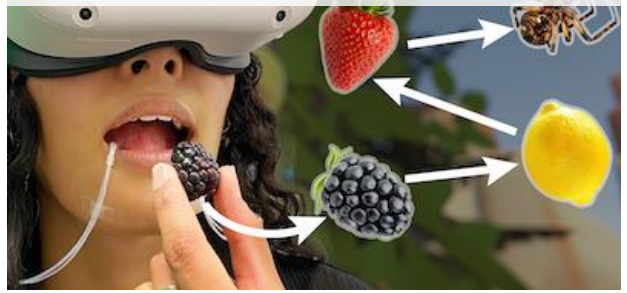

Taste Retargeting UIST'23

acknowledgements

human computer integration lab

our team

Pedro Lopes (CV)
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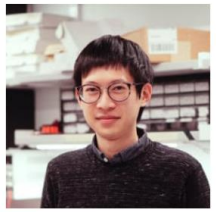
Yun Ho
PhD student

Jas Brooks
PhD student



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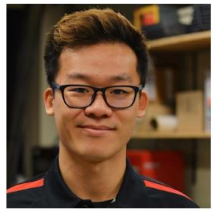

Romain Nith
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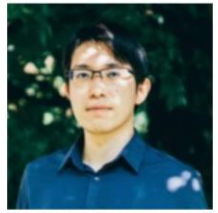
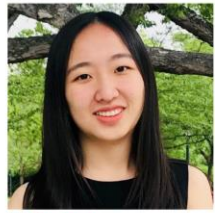
Andre De La Cruz
Ugrad

some of our alumni



Jun Nishida
Postdoc 2019-22
Now: Assist. Prof. UMaryland



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Now: Apple (Haptics)

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Now: Princeton MSE