

# Usability Evaluation of Augmented Reality: A Neuro-Information-Systems Study

Jun Wu<sup>\*1</sup>, Di Zhang<sup>\*1</sup>, Tao Liu<sup>2,3,4</sup>, Helen Hong Yang<sup>5</sup>, Yi Wang<sup>1</sup>, Huili Yao<sup>1</sup>, Shinan Zhao<sup>1</sup>

<sup>1</sup>Economics and Management School, Jiangsu University of Science and Technology <sup>2</sup>School of Health, Fujian Medical University <sup>3</sup>School of Management, Shanghai University <sup>4</sup>School of Management, Zhejiang University <sup>5</sup>Business School, La Trobe University

\*These authors contributed equally

## Corresponding Author

Tao Liu  
lt\_2020@fjmu.edu.cn

## Citation

Wu, J., Zhang, D., Liu, T., Yang, H.H., Wang, Y., Yao, H., Zhao, S. Usability Evaluation of Augmented Reality: A Neuro-Information-Systems Study. *J. Vis. Exp.* (189), e64667, doi:10.3791/64667 (2022).

## Date Published

November 30, 2022

## DOI

10.3791/64667

## URL

jove.com/video/64667

## Materials

Name	Company	Catalog Number	Comments
AR Engine	Unity Technologies	2020.3.1	AR development platform
AR SDK	PTC	Vuforia Engine 9.8.5	AR development kit
Eye Tracker (eye tracking glasses)	SMI, Germany	SMI ETG	Head-mounted eye tracking system
Eye Tracker Recording software	SMI, Germany	iViewETG Software	Eye Tracker Recording software
fNIRS probes	Artinis Medical Systems BV, Netherlands	Artinis Portalite	Light source: Light emitting diodes Wavelengths: Standard nominal 760 and 850 nm
fNIRS software	Artinis Medical Systems BV, Netherlands	OxySoft 3.2.70	fNIRS data recording and analysis software
Mineral Water	Groupe Danone	Badoit	Experimental material in the AR condition Capacity: 330ml Price: ¥6
Mineral Water	Nestlé	Acqua Panna	Experimental material in the website condition Capacity: 250ml Price: ¥5.4
Skin Preparation Gel	Weaver and Company	Nuprep	Clean the forehead skin of the participants
Smartphone	Xiaomi	Redmi K30 Ultra	Smartphone-based AR application and website