# Article information:

ARnnotate：用于收集3D手-物体交互姿势估计的自定义数据集的增强现实接口
<https://dl.acm.org/doi/fullHtml/10.1145/3526113.3545663>

# Article summary:

1. ARnnotate is an augmented reality (AR) interface that allows users to create custom datasets for 3D hand-object interaction pose estimation using AR devices with hand tracking capabilities.

2. User studies were conducted with 12 participants, which showed the system's spatial accuracy of labels, satisfactory performance of deep neural networks trained with data collected by ARnnotate, and user subjective feedback on usability.

3. ARnnotate guides users to operate virtual boundary boxes and records their poses and user's hand joint positions as labels, while capturing the user's first-person view as dataset images through back-end processing for time pairing with corresponding labels.

# Article rating:

Appears well balanced: The article presents the information in a reliable and balanced way, without biases and prejudices. The claims made in the article are well supported and, where applicable, all sides of the argument are given opportunity to present their point of view. The article appears trustworthy and reliable.

# Article analysis:

The article “ARnnotate: An Augmented Reality Interface for Collecting Custom Datasets for 3D Hand-Object Interaction Pose Estimation” is a reliable source of information about the use of augmented reality (AR) interfaces to collect custom datasets for 3D hand-object interaction pose estimation. The authors provide evidence from user studies that demonstrate the system’s spatial accuracy of labels, satisfactory performance of deep neural networks trained with data collected by ARnnotate, and user subjective feedback on usability. The article also provides a detailed description of how ARnnotate works, including guiding users to operate virtual boundary boxes and recording their poses and user's hand joint positions as labels, while capturing the user's first-person view as dataset images through back-end processing for time pairing with corresponding labels.

The article does not present any potential biases or one-sided reporting; it presents both sides equally in terms of its discussion on the advantages and limitations of using AR interfaces to collect custom datasets for 3D hand-object interaction pose estimation. Furthermore, all claims made in the article are supported by evidence from user studies conducted by the authors. There are no missing points of consideration or missing evidence for any claims made in the article; all relevant information is provided in detail. Additionally, there are no unexplored counterarguments or promotional content presented in the article; it is purely factual and objective in nature. Finally, possible risks associated with using AR interfaces to collect custom datasets are noted throughout the article; thus, overall this source can be considered trustworthy and reliable when discussing this topic.

# Topics for further research:

* Augmented Reality Dataset Collection
* 3D Hand-Object Interaction Estimation
* Virtual Boundary Boxes
* Deep Neural Network Training
* ARnnotate Usability
* AR Interface Risks

# Report location:

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