# Article information:

草绘现实：使用 AR 和致动的有形 UI 勾勒虚拟世界和物理世界之间的双向交互  
<https://d.buaa.edu.cn/https/77726476706e69737468656265737421f4fb0f9d243d265f6c0f/doi/fullHtml/10.1145/3526113.3545626>

# Article summary:

1. This article introduces Sketched Reality, a method of combining AR sketches and actuated tangible user interfaces (TUIs) for bidirectional sketching interactions.

2. This system allows virtual sketches to move, drive, collide and constrain physical Toio robots as if the virtual sketches and physical objects exist in the same space through seamless coupling between AR and robot motion.

3. The paper provides a set of novel interactions and design spaces for bidirectional AR sketching, with potential applications such as tangible physical education, explorable mechanisms, tangible children's games, and on-site robot programming via sketches.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article is generally trustworthy in its presentation of the concept of Sketched Reality and its potential applications. The authors provide detailed descriptions of their system setup and experiments conducted to demonstrate the concept. They also provide examples of potential applications that could be developed using this technology. However, there are some areas where the article could be improved in terms of trustworthiness. For example, while the authors discuss potential risks associated with this technology (e.g., privacy concerns), they do not provide any concrete solutions or strategies for mitigating these risks. Additionally, while the authors discuss potential applications for this technology, they do not explore any counterarguments or alternative perspectives on how this technology might be used or misused by different stakeholders (e.g., governments). Finally, while the authors present their own research findings in detail, they do not cite any other relevant research studies that have explored similar topics or technologies related to Sketched Reality.

# Topics for further research:

* Sketched Reality applications
* Privacy implications of Sketched Reality
* Ethical considerations of Sketched Reality
* Government use of Sketched Reality
* Research studies on Sketched Reality
* Potential risks of Sketched Reality

# Report location:

<https://www.fullpicture.app/item/c8e8167a0d7eb908641533cc72ca586d>