

## Innsbruck Multi-View Hand Gestures (IMHG) Dataset

Hand gestures are one of the natural forms of communication in human-robot interaction scenarios. They can be used to delegate tasks from a human to a robot. To facilitate human-like interaction with robots, a major requirement for advancing in this direction is the availability of a hand gesture dataset for judging the performance of the proposed algorithms.

### Dataset Features

- 22 participants performed 8 hand gestures in the context of human-robot interaction scenarios taking place in a close proximity.
- 8 hand gestures categorized as:
  1. 2 types of referencing (pointing) gestures with the ground truth location of the target pointed at,
  2. 2 symbolic gestures,
  3. 2 manipulative gestures,
  4. 2 interactional gestures.
- A corpus of 836 test scenarios (704 referencing gestures with ground truth, and 132 other gestures).
- Hand gestures recorded from two views (frontal and side) using RGB-D Kinect sensor.

[Download](#)

### Reference

Dadhichi Shukla, Ozgur Erkent, Justus Piater, The IMHG dataset: A Multi-View Hand Gesture RGB-D Dataset for Human-Robot Interaction. Towards Standardized Experiments in Human Robot Interactions, 2015 (Workshop at IROS). Extended Abstract.[PDF](#).

### BibTex

```
@InProceedings{Shukla-2015-StandardHRI,  
  title = {{The IMHG dataset: A Multi-View Hand Gesture RGB-D Dataset for  
Human-Robot Interaction}},  
  author = {Shukla, Dadhichi and Erkent, Ozgur and Piater, Justus},  
  booktitle = {{Towards Standardized Experiments in Human Robot  
Interactions}},  
  year = 2015,  
  month = 10,  
  note = {Workshop at IROS},  
  url = {https://iis.uibk.ac.at/public/papers/Shukla-2015-StandardHRI.pdf}  
}
```

### Acknowledgement

The research leading to these results has received funding from the European Community's Seventh Framework Programme FP7/2007-2013 (Specific Programme Cooperation, Theme 3, Information and Communication Technologies) under grant agreement no. 610878, [3rd HAND](#).

### Contact

dadhichi[dot]shukla[at]uibk[dot]ac[dot]at

From:

<https://iis.uibk.ac.at/> - IIS

Permanent link:

[https://iis.uibk.ac.at/research/projects/3rdhand/imhg\\_dataset?rev=1450043272](https://iis.uibk.ac.at/research/projects/3rdhand/imhg_dataset?rev=1450043272)

Last update: **2018/09/03 14:57**

