



# Title of the Challenge

# From Bow to Handshake: Robotics in Intercultural Communication

# What is the main issue the challenge addresses?

The advancement of large language models (LLMs) has enabled human-like interaction, augmenting our capabilities and letting us learn, reason, and converse. However, not much has been explored regarding the use of LLMs in robotics, especially in the cultural space. How can we design humanoid companion AI that could help us adapt to a new culture easily?

#### **Call to Action**

To design and develop a robotic system or application that can recognize and adapt to specific cultural gestures and communication styles, for example, using Pepper, the humanoid robot powered by LLMs, to teach specific cultural gestures and converse with users from different cultural backgrounds to foster intercultural communication.

## What is the desired impact of the challenge?

The desired impact of the challenge is to advance the cultural sensitivity and adaptability of robotics, enabling robots to communicate more effectively and respectfully in diverse, multicultural settings.

### **Related SDGs**



## Who is behind this challenge?

TUM: Chair of Human-Centered Technologies for Learning