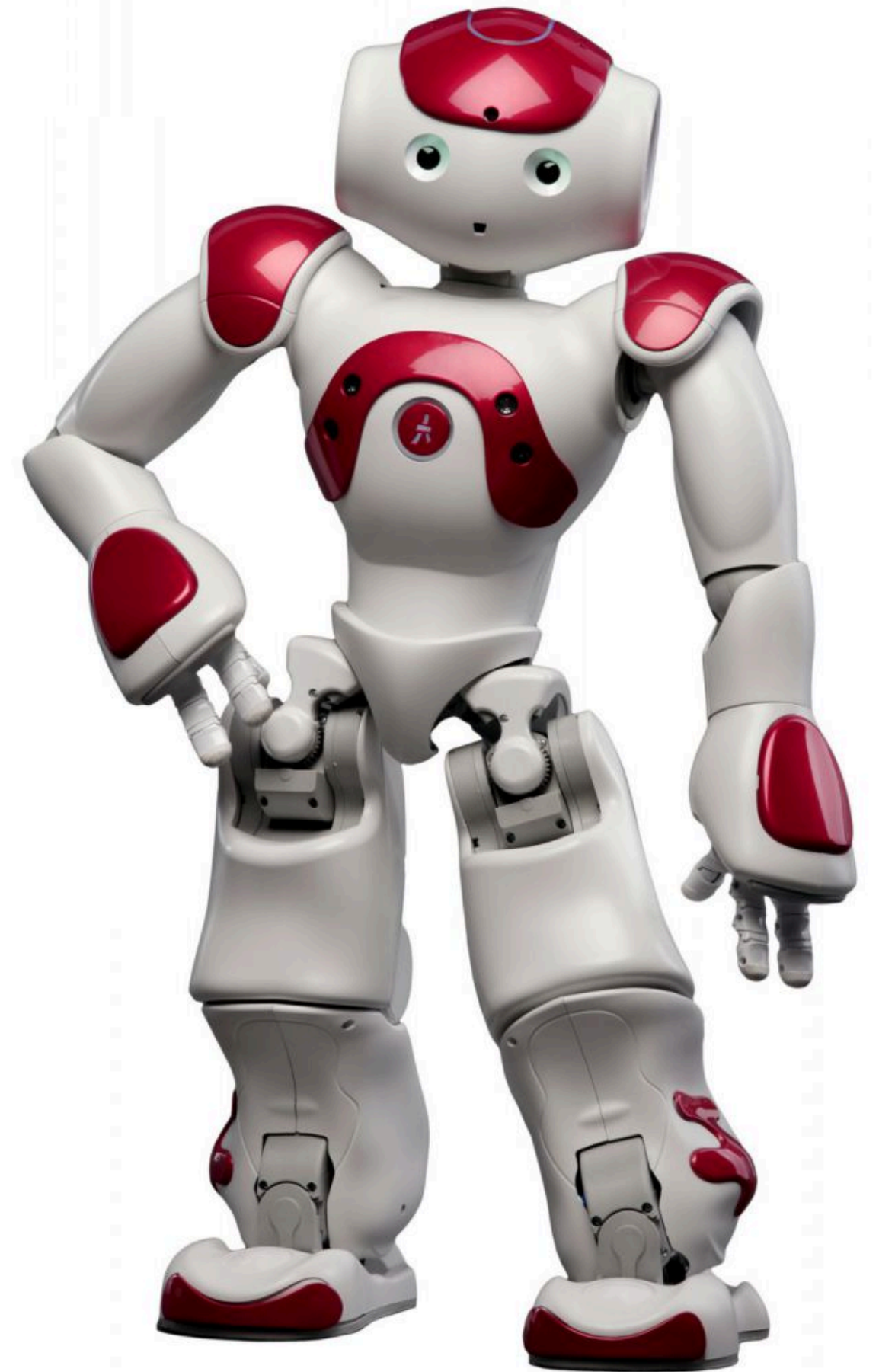


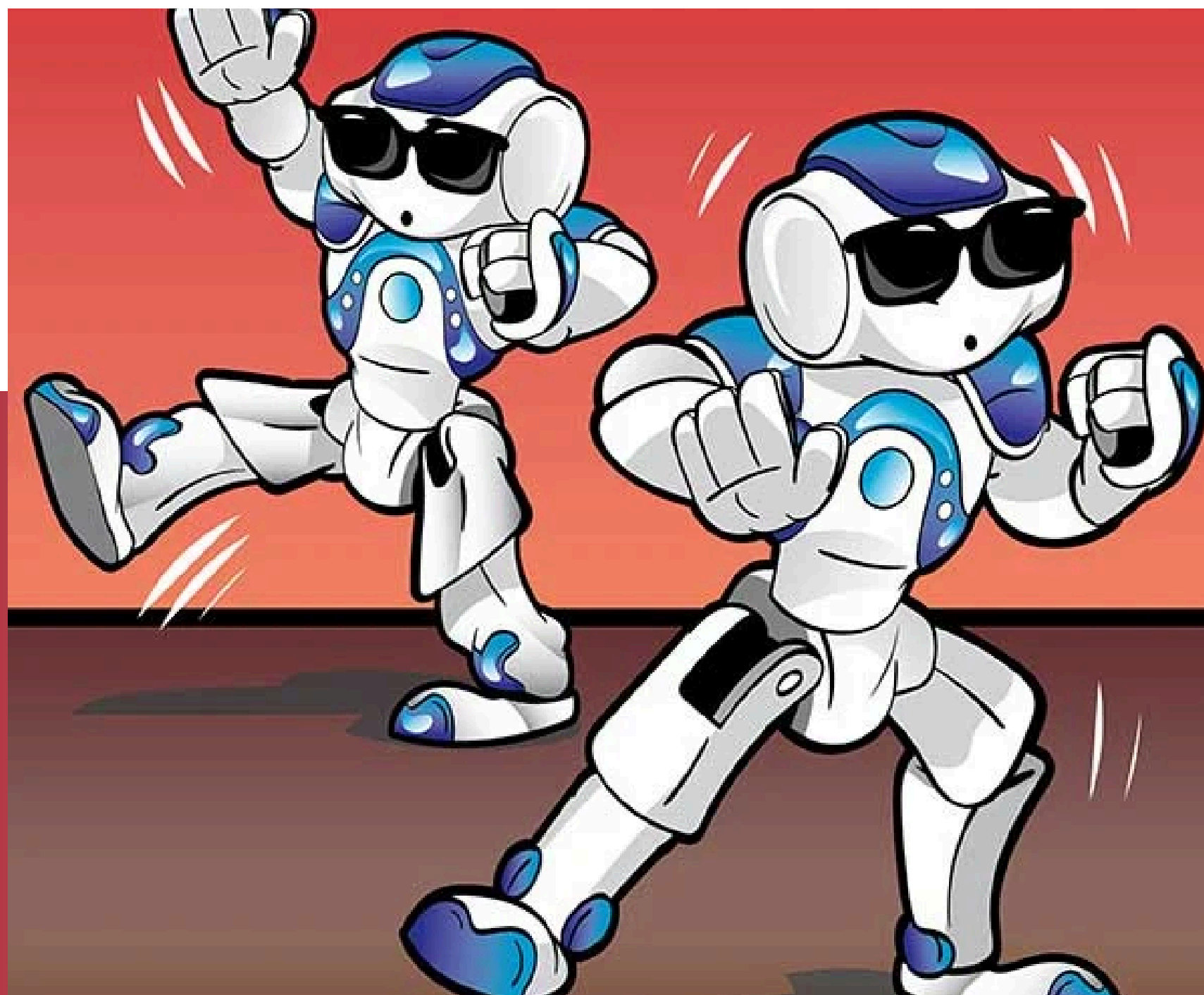
# NAO PLANNING CHALLENGE 2025

LORENZO COLLIVA  
GIADA DE MICCO



**BallaConNAO**





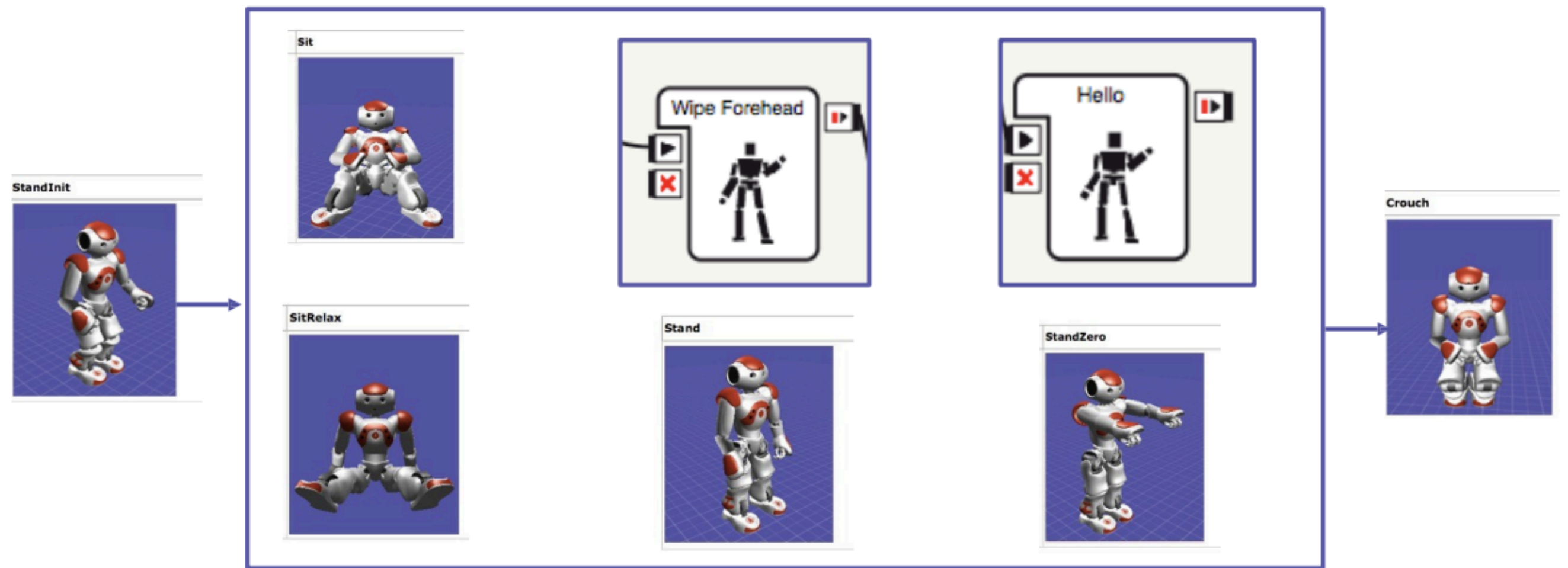
# DANCE COREOGRAPHY

Reggaeton Song: Muevelou - Natanael  
cano



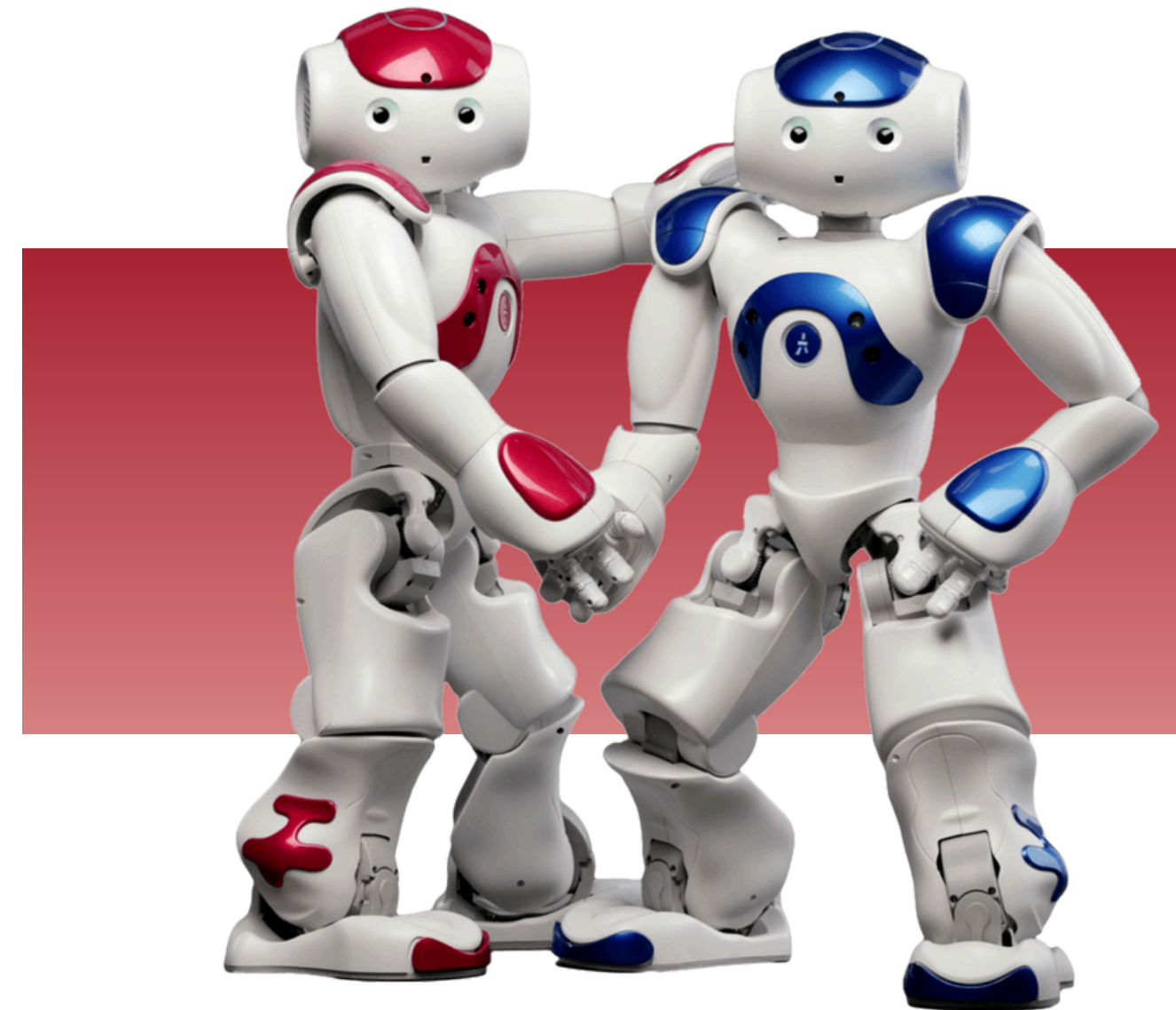
# COMPETITION RULES

- Total time of choreography 2 minutes
- Initial state (StandInit)
- Goal (Crouch)
- 6 mandatory positions
- At least 5 intermediate positions selected by the algorithm



# IMPLEMENTATION

- Coded in Python
- Search Algorithm: A\*, through AIML Library
- Heuristic function combines three aspects: Entropy, Remaining Time, Musical Energy
- Check if the preconditions are satisfied
- Avoid repeating moves



**Repo:** <https://github.com/LorenzoCollivaUnibo/BallaConNao>

**THANKS FOR THE  
ATTENTION**

***Now BALLA CON NAO!***