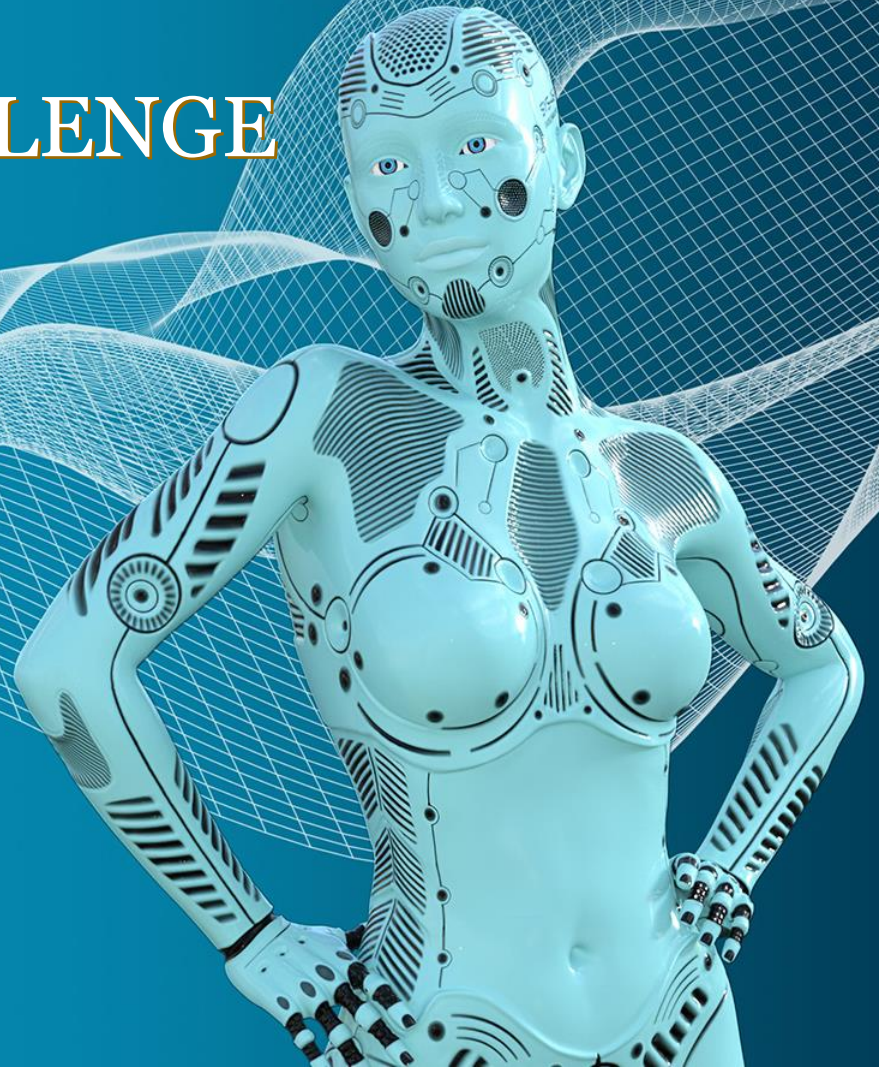


# NAO PLANNING CHALLENGE

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# Algorithm

- Graphplan
- Python
- AIMA library



# Mandatory positions and transitions

- Mandatory positions = ["StandInit", "Sit", "WipeForehead", "Hello", "UnionArms", "Stand", "StandZero", "Crouch"]
- Sample of Transitions: StandInit, SprinklerLeft, Crouch, DiagonalRight, MoveForward...Crouch
- All intermediate independent plans are unified into one choreography

# Modeling

- Pre-conditions for a movement between position P1 and P2:
  - NAO is in position P1
  - P1 is compatible with P2
- Postcondition:
  - NAO not in P1
  - NAO in P2

# At least 5 positions constraint

- If number of positions generated are below 5, then we should remove the early goal from the plan
- Remove the compatibility between the second last and the goal
- Take the second last as the new initial position
- Generate a new plan between the new initial position to the intermediate goal

# Thank you

- <http://doc.aldebaran.com/2-1/naoqi/motion/control-wholebody-tuto.html>
- [NAOqi - Developer guide — Aldebaran 2.5.11.14a documentation](#)
- [Choregraphe Tutorials — Aldebaran 2.1.4.13 documentation](#)

