

Team iKun

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# NAO Planning Challenge 2023



# Dance Choreography

- Song: Christmas - neozilla



# Implementation

- Coded entirely in Python
- Time constraint: Each run is different, but always less than 2 minutes.
- Actions' duration has been measured and inserted inside the code

# Implementation

- 6 mandatory positions and at least 5 of the mandatory ones must be used
- between mandatory positions, it selects some of the intermediate ones
- Consecutive moves must be compatible à check preconditions

# ALGORITHM

- Search algorithm: A-Star
- It builds a solution by iteratively adding moves and their respective time checking the constraints
- Additional constraint: same move is not repeated one time after the other
- Repo: <https://github.com/Puntino-Sun/NAO-Challenge-with-Astar-Unibo>

THANKS FOR YOUR  
ATTENTION!