## **IEEE Ottawa Robotics Competition**

# Dancing Robot Challenge

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It is your responsibility to review this document on a regular basis as it may be updated from time to time. Please contact the Arduino Team at <a href="mailto:orcarduino@gmail.com">orcarduino@gmail.com</a> if you have any questions.

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#### 2. Introduction

Who says robots can't dance? The Dancing Robot Challenge combines the technical skills of engineering with the creative process of the arts. Throughout this challenge, not only will you get the chance to assemble and program a robot, but you'll also need to make it perform a dance routine accompanied by the music of your choice!

#### 3. Rules

- 1. The robot has 2 minutes to showcase an autonomous dance routine.
- 2. The robot must start its performance at the center of a 55 cm x 55 cm area (the "stage") and must remain in this area throughout its performance.
- 3. Participants may use props that fit within the stage area and are less than 30 cm tall.
- 4. Participants are allowed one reset of their robot to accommodate technical glitches.

### 4. Judging and Scoring

- 1. The challenge will be timed and judged by a team of Ottawa Robotics Competition judges.
- 2. The robot will be scored according to the following criteria
  - a. <u>Choreography:</u> the cohesiveness of the dance routine, synchronisation with the music, and complexity of the dances moves.
  - b. <u>Creativity:</u> the use of internal components and/or external props to enhance the dance routine.
  - c. <u>Construction</u>: the quality of the robot's design, assembly, and programming.

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