

RoboCupJunior 2021

Soccer Simulation

Team Description Paper

Team Name : **musou_japan_**

Team Member / Email : Takuto Uemura / tarenschangcun4@gmail.com
Kouga Miyuki / votaisei5@gmail.com

Mentor : Haruki Fujii

Institution : Amagasaki Sosei Senior High School

Region : Hyogo, Japan

Contact Person / Email: Haruki Fujii (Mentor) / fujiiharuki@hotmail.co.jp

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Team achievements (Team Musou)

RoboCup experience

1. Participation in RoboCup Junior Japan Hanshin Block Soccer Lightweight Division
2. Participation in International RobCupJuniorSoccerVirtual 2020
※Submitted video
URL <https://youtu.be/2tdapz0W0Jo>
3. RoboCup Junior Japan Online 2021 Soccer Open Category 6th
※Submitted video
URL <https://youtu.be/dxhl59aQ080>
※Robot code
Code URL <https://github.com/kurages/Euclid>

Members Introduction

- Takuto Uemura
I like a robot.
I usually work on the soccer open league.
I handle to invent the strategy about soccer.
- Kouga Miyuki
I like Programming.
I first programmed when I was 12 years old.
My favorite programming language is Python.
I handle to product of program.

Introduction

Our team belong to club in school.

Our club name is Information and Technology Club.

Our club's belief is creating a better society and country with information and technology.

Our team are working on the soccer open league too.

We are making the Robots and program.

Some club members are working on rescue simulation.

Therefore we have **Robot experience** and **simulation experience**.

We formed for this tournament.

We originally participated in another event.

This tournament has led us to become interested, so we decide to participate.

We are two people who like to program and make things.

So, we share a role and create a program.

• Team photo (towards the photo)



Left side (Miyuki) Right side (Uemura)

About team name

The meaning of our team name is that there is nothing else to match.

Another meaning is that the method of making equipment is clever.

I want to make a team that matches this name.

Strategy

We use an instance variables in our program's.

By using this, we can be used in various functions.

We are divided by attacker robots and defender robots.

At first, we are going to explain about attack robots.

Attacker robots first get position of the ball and confirms the direction.

The angle of the ball is the angle of the ball is the angle of the ball acquired multiplied by three - half.

It is because this method allows you to turn around by shifting it slightly from the original angle.

If this value is greater than 360 degrees, this value minus 360.

By doing this, even if the angle is more than 360 degrees, it can be accommodated.

Next, we are going to explain about defender robots.

The rearmost robot of the three robots is the defender.

However, if the defender robot is closest to the ball, the defender will attack as an attacker robot.

Therefore robot that are always close to the ball can attack.

Future tasks

I want to make the wraparound movement more beautiful.

I want the defender to attack depending on the situation.