



T-semi Activity Report

December 14, 2023
Itsuki Hayashi

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1. About us
2. Our activities
 - Robot Contests
 - School Festival

1. Who are we?

T-Semi:

Robot circle in Tohoku
University that aims to enhance
engineering skills together

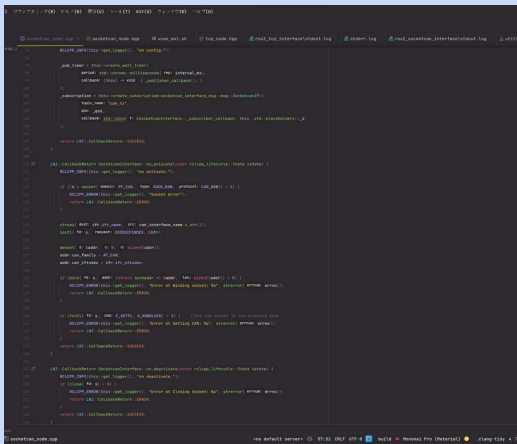


1. Who are we?



Software

Tohoku University
Engineering Seminar



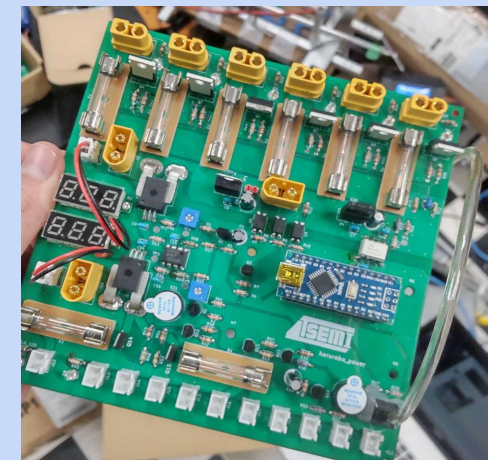
Hardware

Material System
Seminar



Electric circuits

Autonomous Control
Seminar



2. Our Activities

NHK Robot Contest

Kanto Spring Robot Contest

Intelligent Robot Contest

Catch Robo Battle Contest

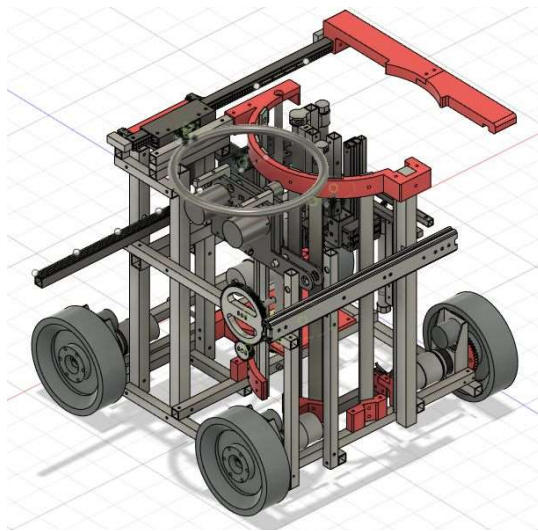
Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug

School Festival

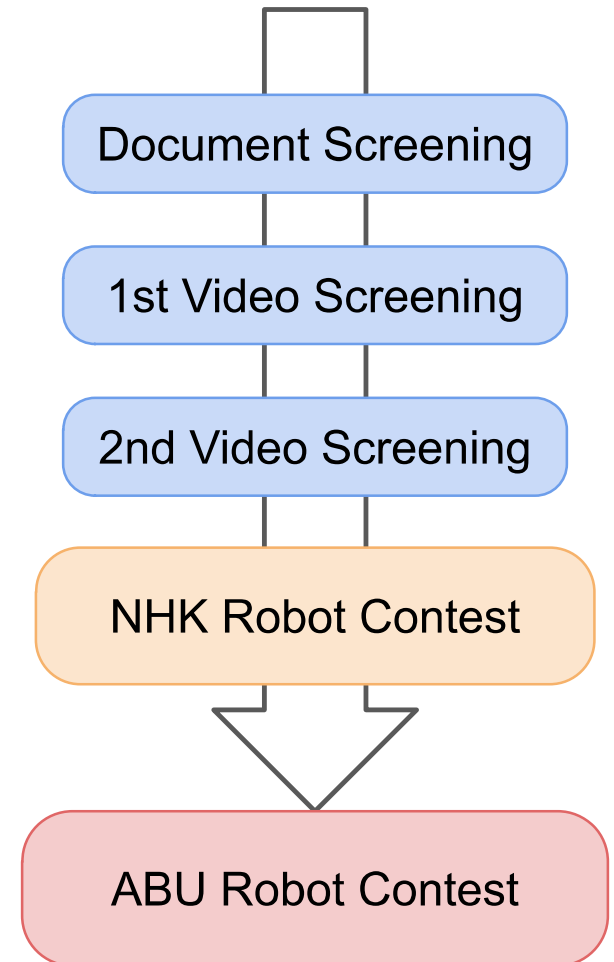
Welcome Event

2. Our Activities : NHK Robot Contest

- The biggest Robot Contest in Japan
- The winning team enters the ABU Robot contest
- Requires two robots: one fully automated and one manually controlled



3D CAD of the robot we made last year



Steps towards the ABU

2. Our Activities : NHK Robot Contest

Result of 2023

2023
NHK
Robo
con

2023年4月30日

学校名：東北大学
プロジェクト名：T-semi

NHK 学生ロボコン2023～ABU アジア・太平洋ロボコン代表選考会～
第2次ビデオ審査の結果について

審査結果：「**不合格**」

第2次ビデオ審査を行った結果、貴チームは誠に残念ですが、不合格となりました。

NHK 学生ロボコン競技委員により、
■課題の達成度
■得点能力の高さを基準に、厳重な審査が行われました。

今後のご健闘をお祈り申し上げますとともに、次回のチャレンジを心よりお待ちしております。

“As a result of the second video screening, your team unfortunately did not pass.”

Currently working towards the 2024 contest

This year, we have to grab two objects



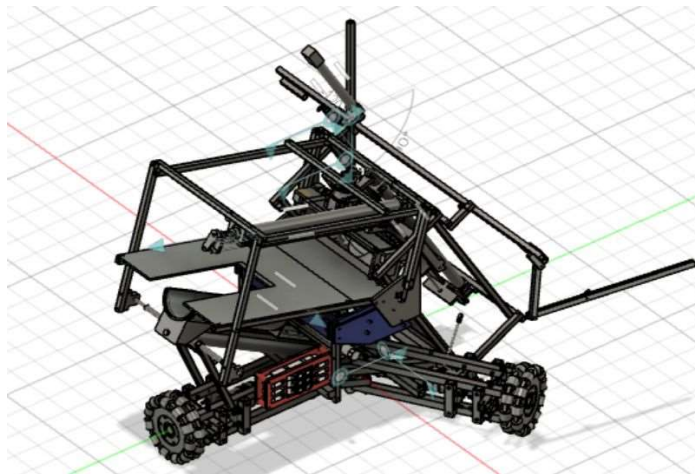
Prototype of a robot arm



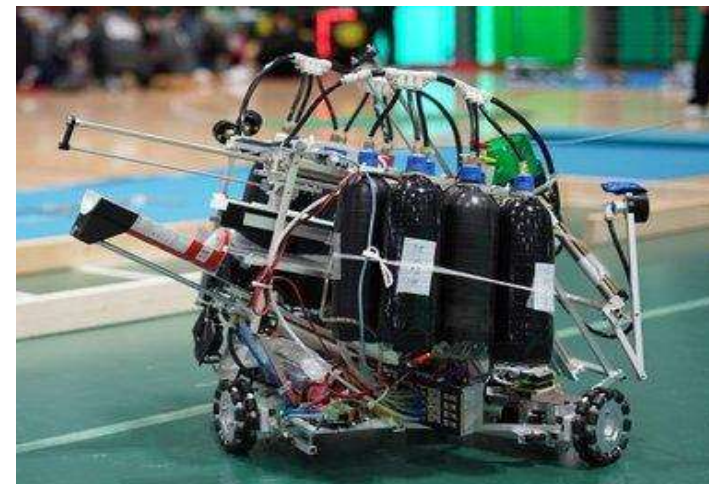
Field object

2. Our Activities: Kanto Spring Robot Contest

- Mainly for first year students
- Provides opportunities to interact with other teams
- Requires one robot that can be maneuvered



3D CAD

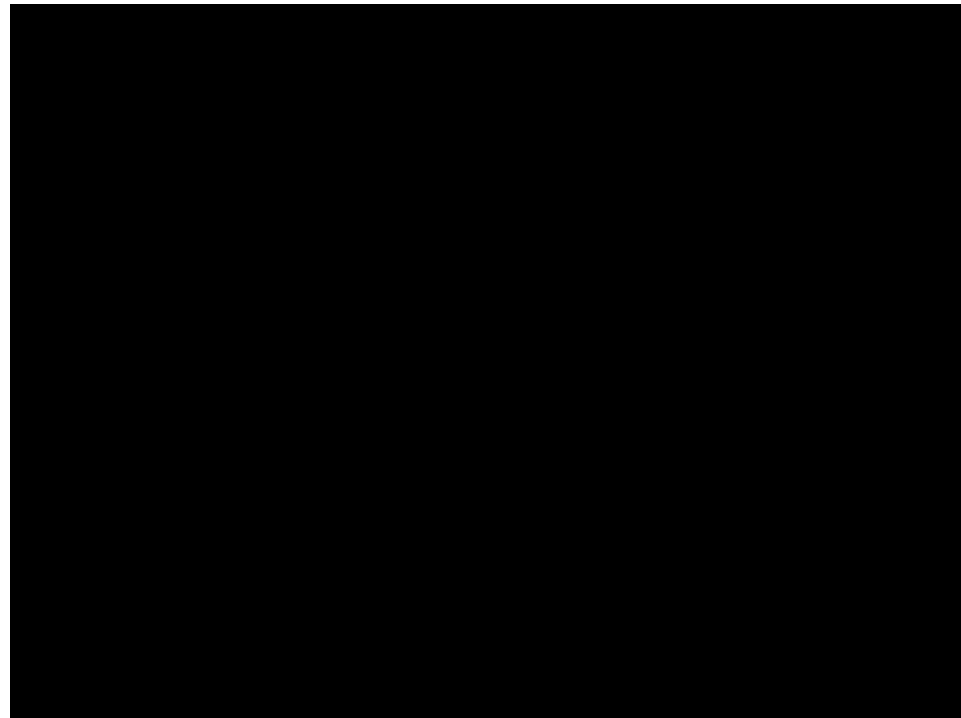


Actual Robot

2. Our Activities: Kanto Spring Robot Contest

Results:

- Design Award
- Defeat against the first opponent



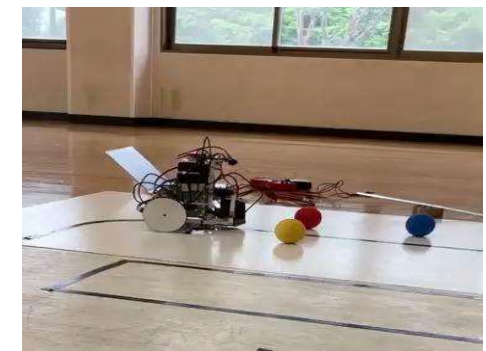
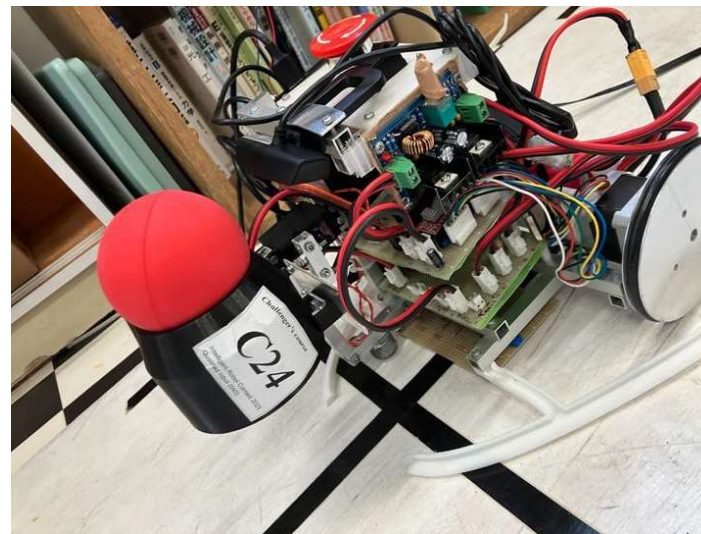
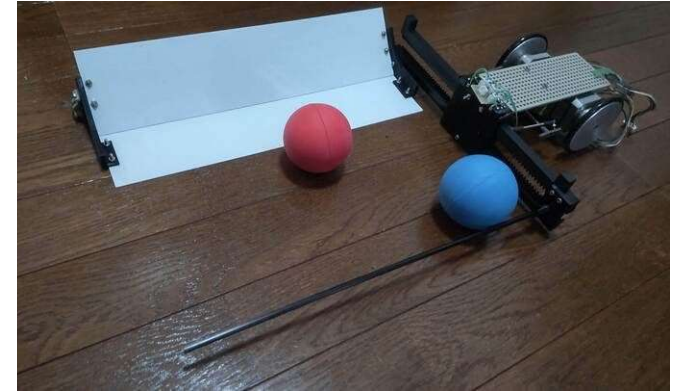
Using balloons to lift an object

2. Our Activities: Intelligent Robot Contest Festival

- Held in Sendai
- Requires one fully automated robot

Two teams took part

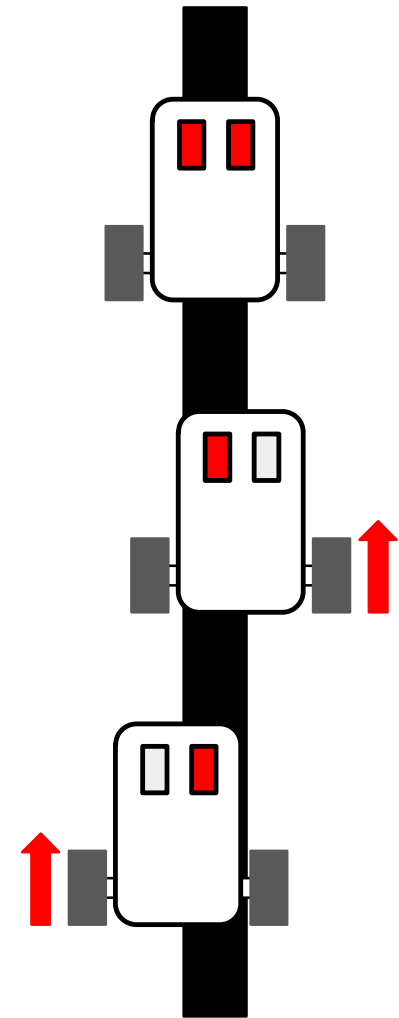
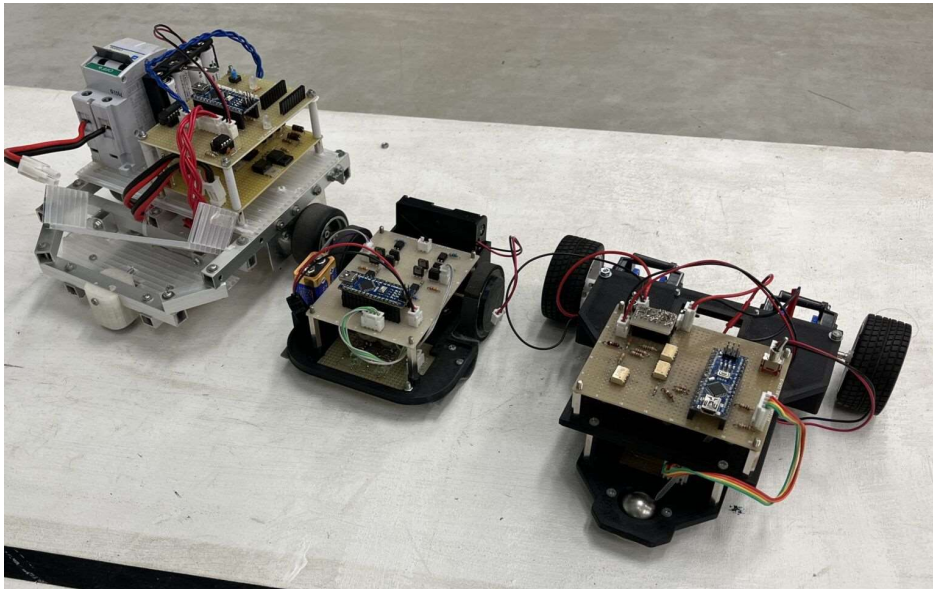
One made it to the second match



2. Our Activities: School Festival

Line Trace Car

Requires the most basic skills required in building a robot

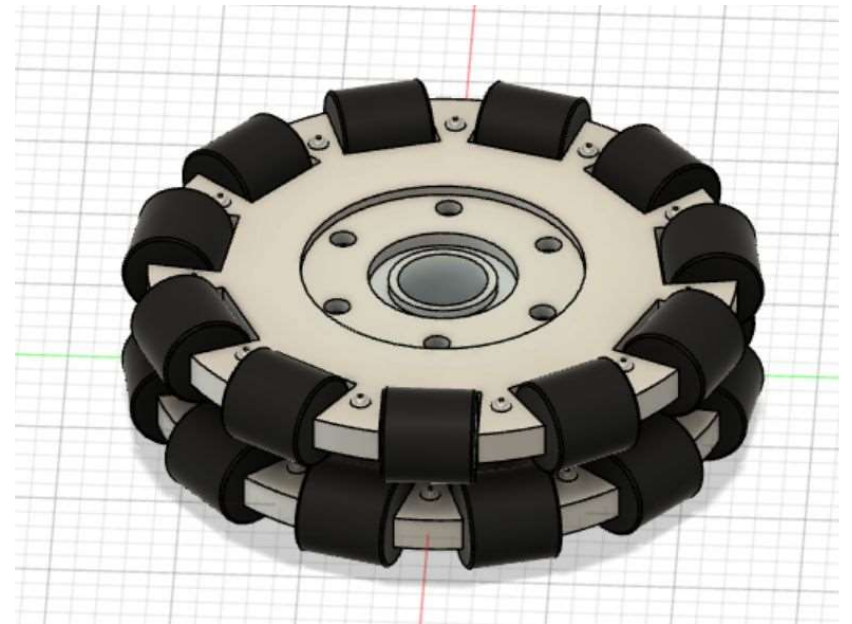
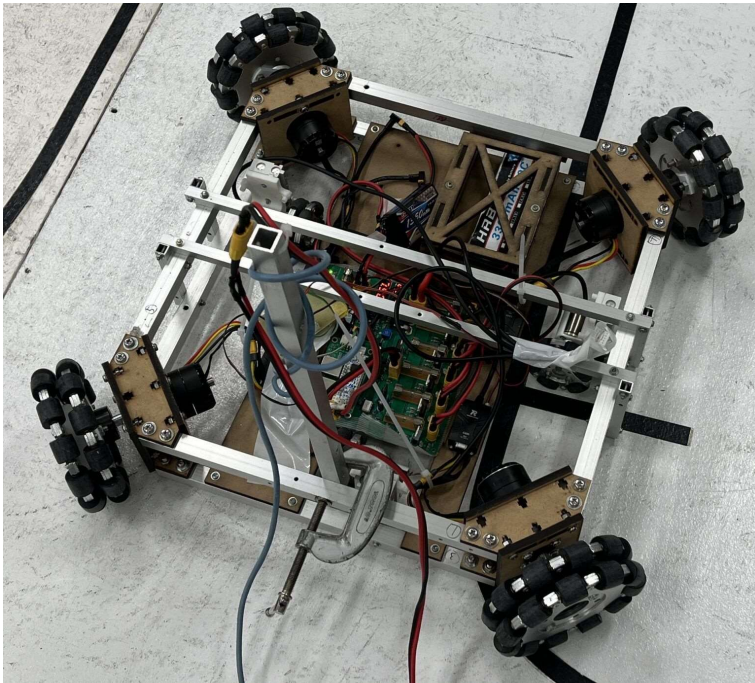


Mechanism

2. Our Activities: School Festival

Omni Wheel Car

Most common method in Robot Contests



Omni Wheel

Slides freely in the direction of the axle

Thank You For Listening!