

T-semi Activity Report

February 16, 2023
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1. About us
2. Our activities
3. Usage of the Boeing Higher Education Program grant

1. Who are we?

T-Semi:

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

1. Who are we?

Three branches

- Software ▪ ▪ ▪ Tohoku University Engineering Seminar
- Hardware ▪ ▪ ▪ Material System Seminar
- Electric circuit ▪ ▪ ▪ Autonomous Control Seminar

2. Our Activities

1. Robot Contests

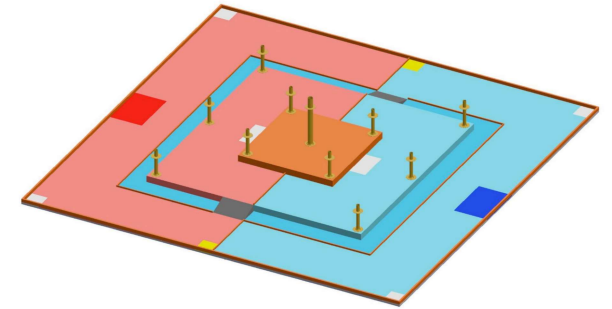
- NHK Robot Contest
- Kanto Spring Robot Contest

2. School festivals

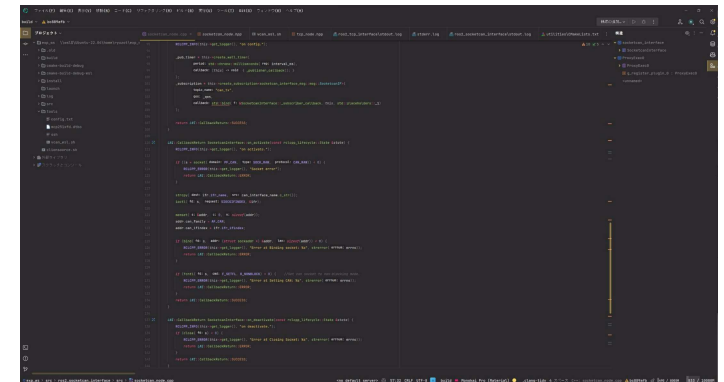
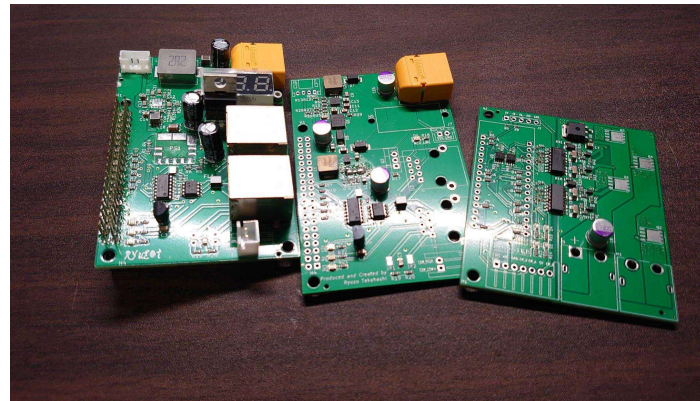
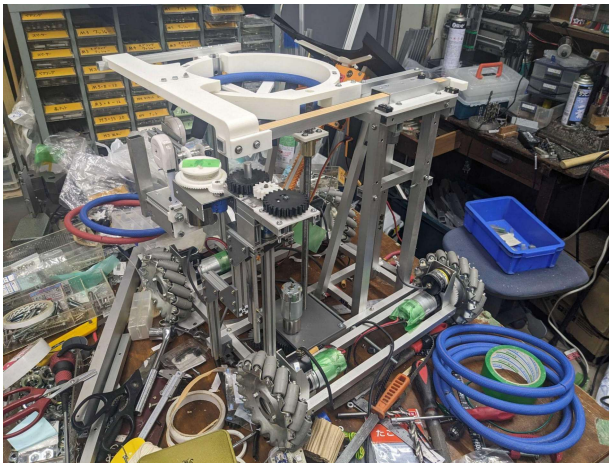
3. Free creation based on personal interests

2. Our Activities : NHK Robot Contest

- Create two different robots to perform a given task
- Implement mechanisms, circuits, and softwares
- Fight against students from all over the country

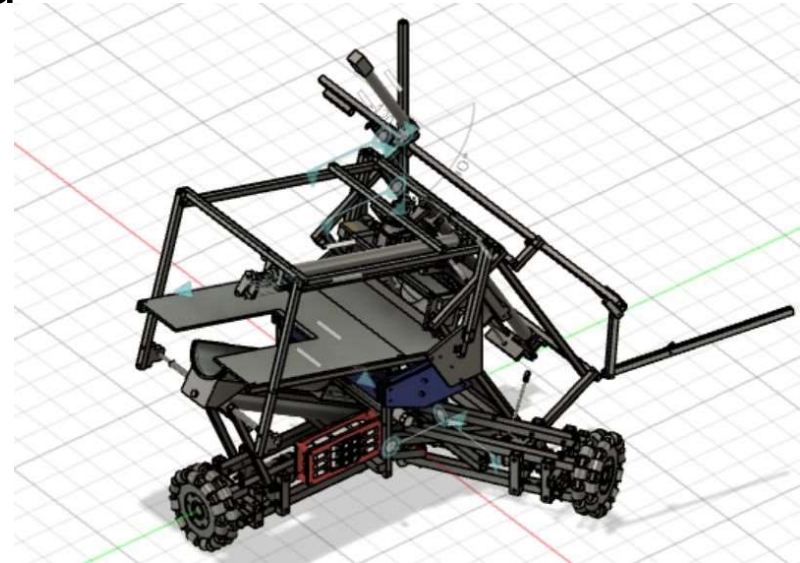
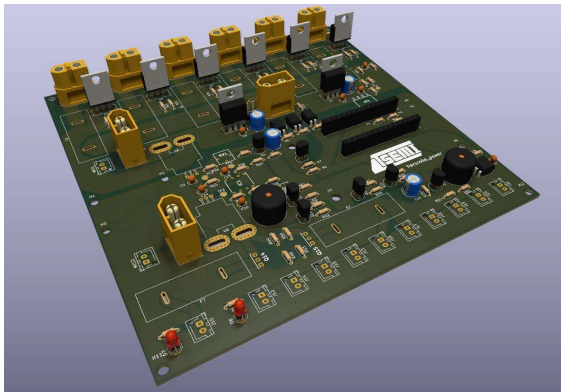


Contest field



2. Our Activities: Kanto Spring Robot Contest

- March 16&17, 2023
- Participants are to create robots that can collect objects and place them in designated areas in the field
- Mainly for first-year students



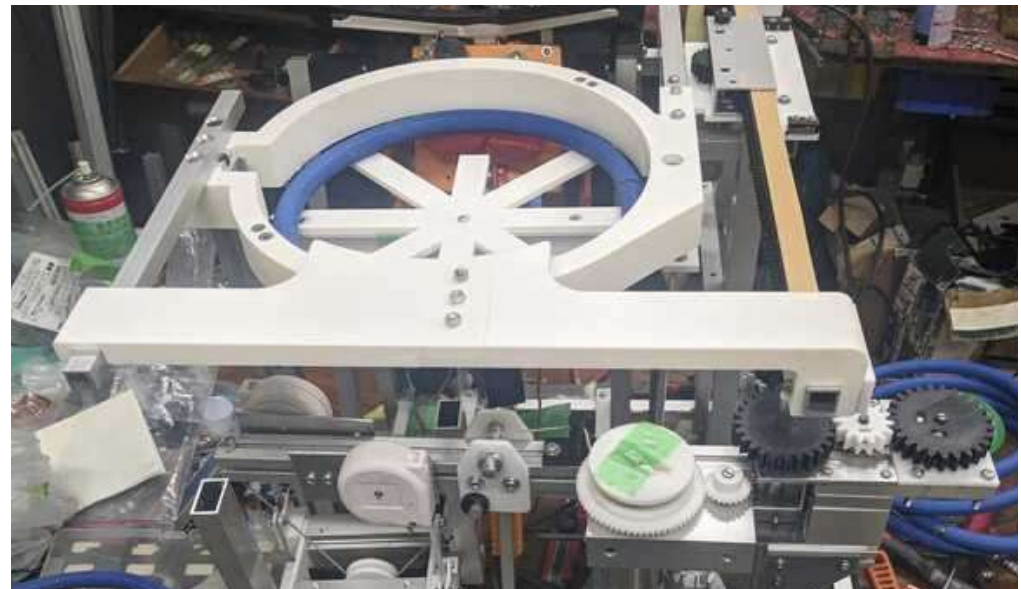
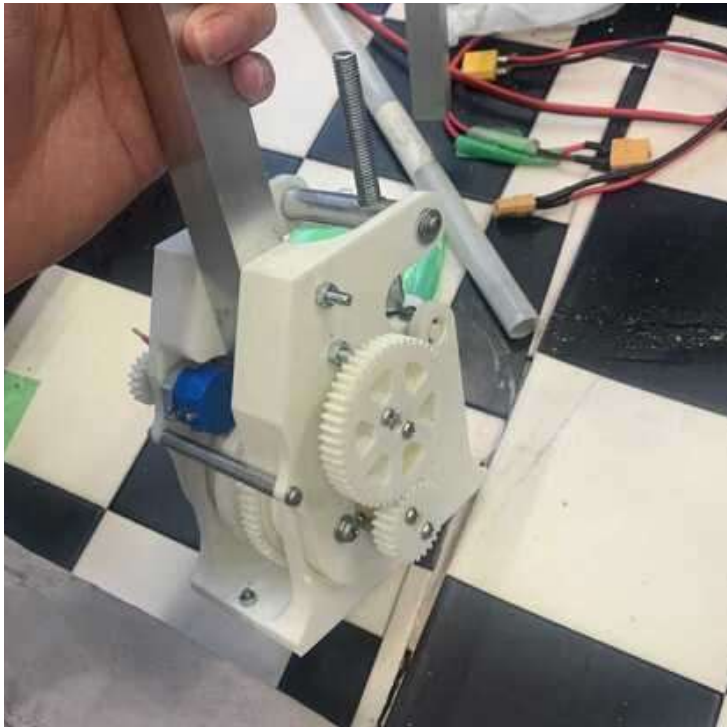
3D CAD

3. Usage of the Boeing grant

- 3D Printer
- DJI Brushless Motor
- Integrated Gear and Shaft

3. Usage of the Boeing grant: **3D Printer**

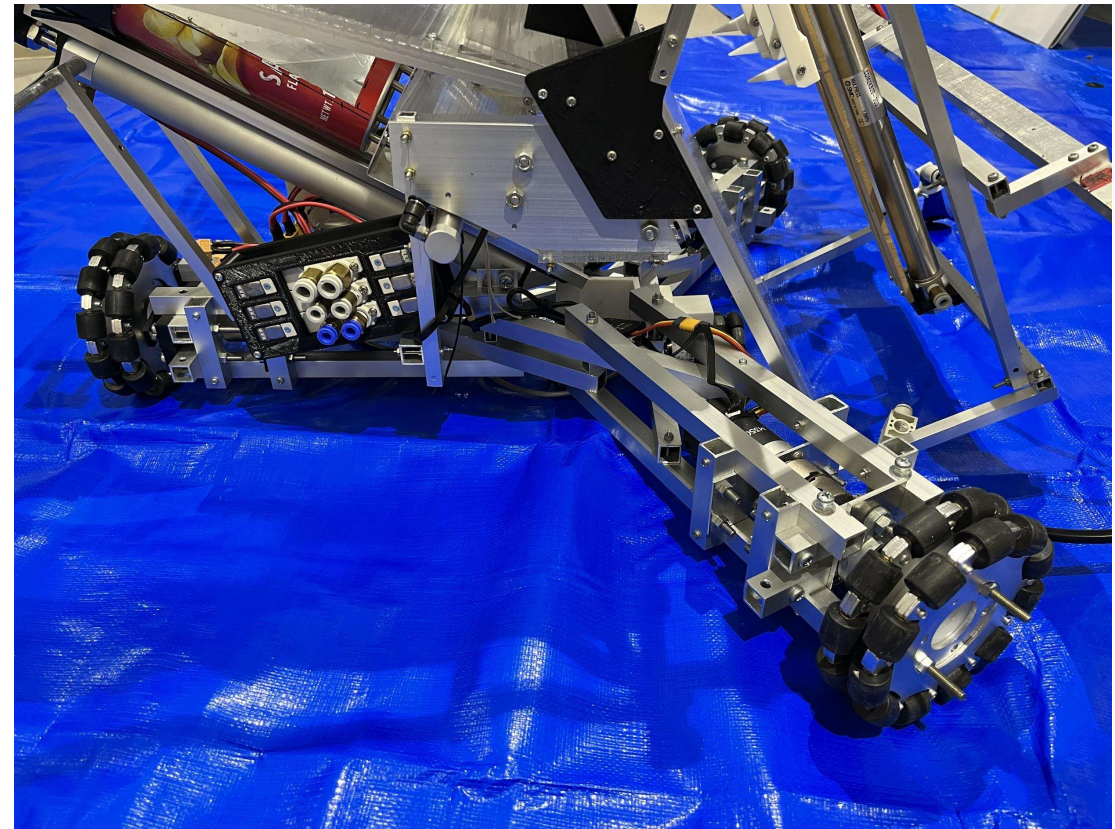
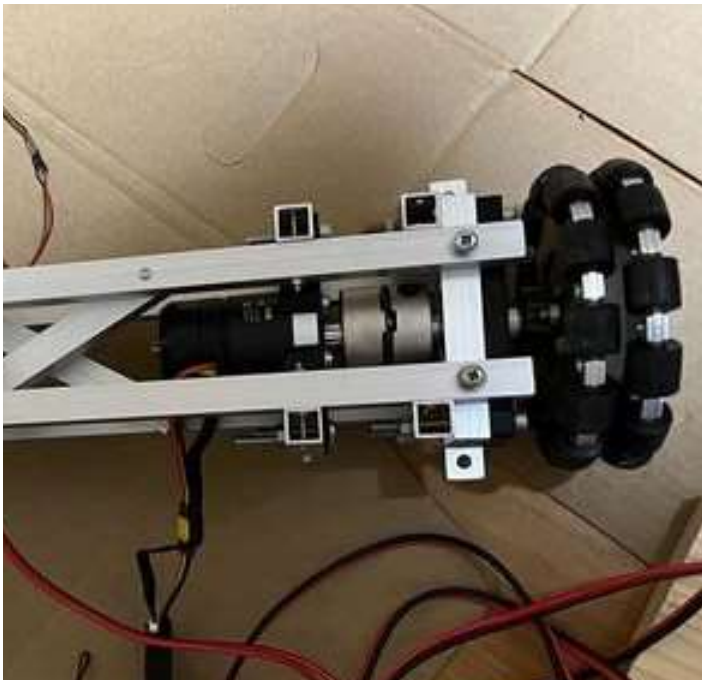
Convenient for making complicated parts



3. Usage of the Boeing grant: **DJI Brushless Motor**

For Kanto Spring Robot Contest

Comes with motor drivers



Creation of 4-Wheel-Steering

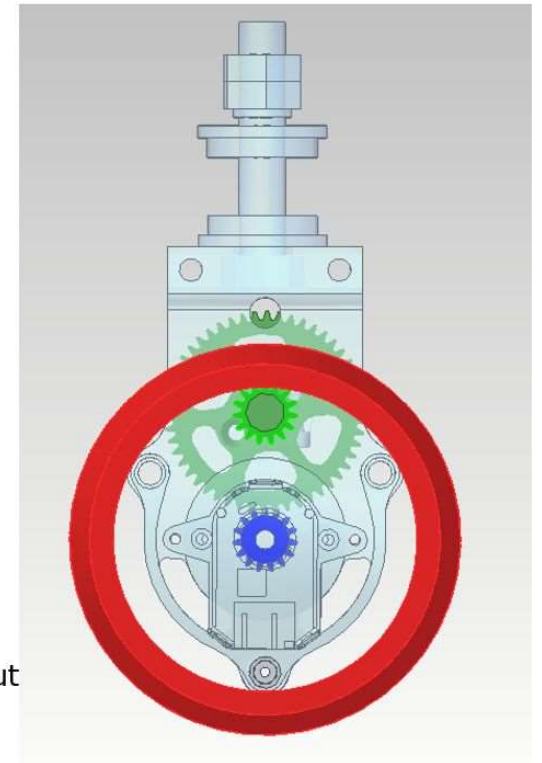
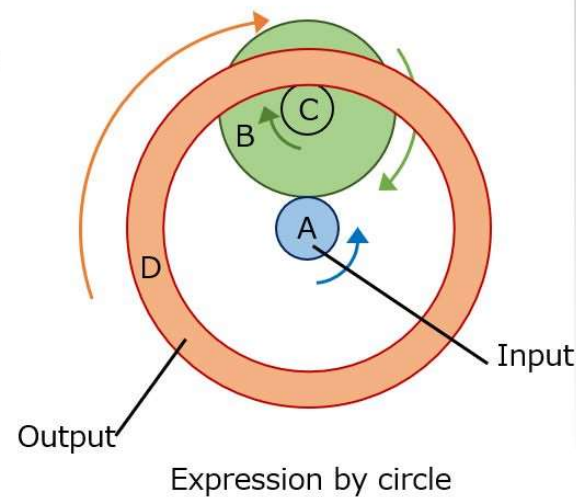
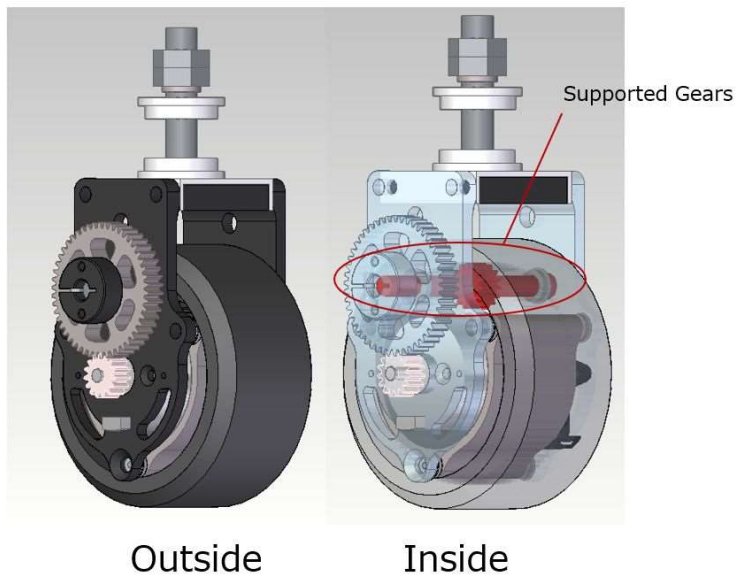
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3. Usage of the Boeing grant : **Integrated Gear and Shaft**

Integrated Gear and Shaft

- Easy to assemble and maintenance
- Enables compact mechanism



Thank You For Listening!