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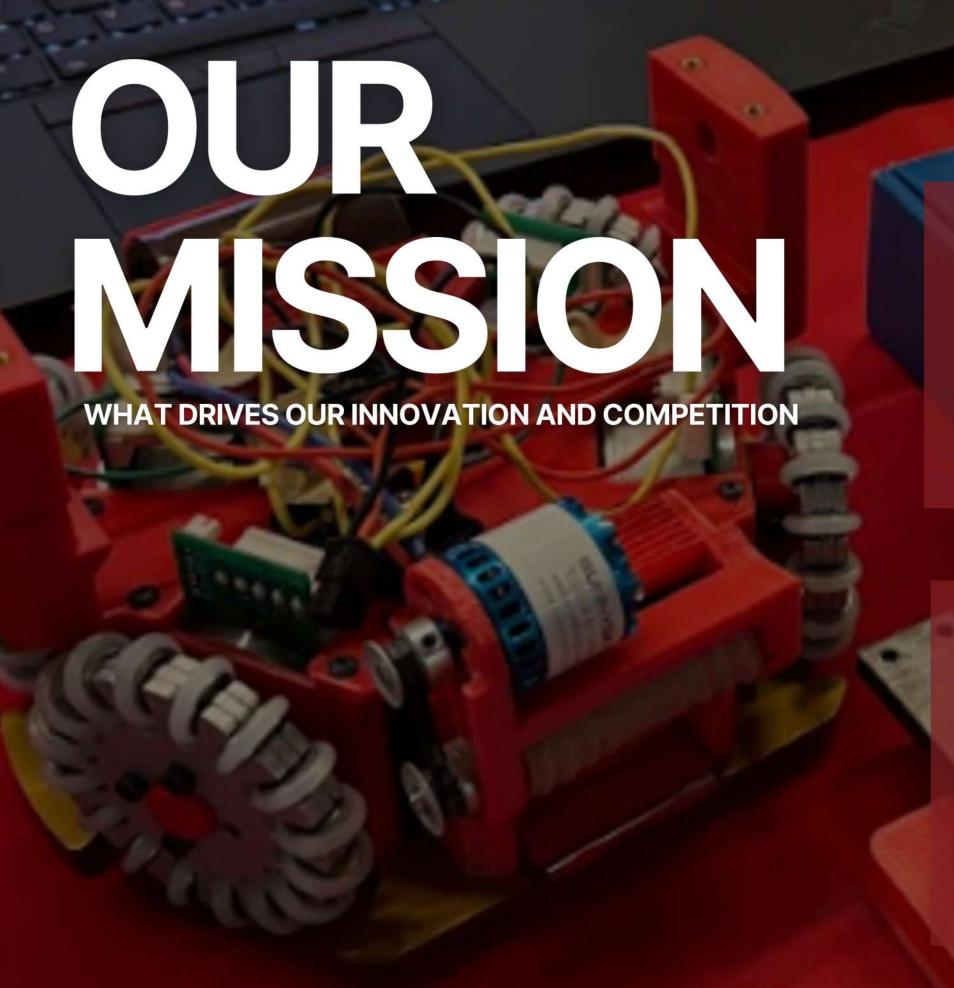
**Sponsorship Benefits** 

# WHO WE ARE THE TEAM BEHIND SFU ROBOT SOCCER





SFU Robot Soccer is a student-run design team committed to building autonomous soccer-playing robots. Our organization is structured into a Technical team and a Business Team, working in tandem to push the boundaries of robotics and artificial intelligence. By Integrating hands-on experience in AI, computer vision and mechatronics, we are developing cutting-edge robotic systems while cultivating technical excellence and strategic leadership.





#### **MISSION STATEMENT**

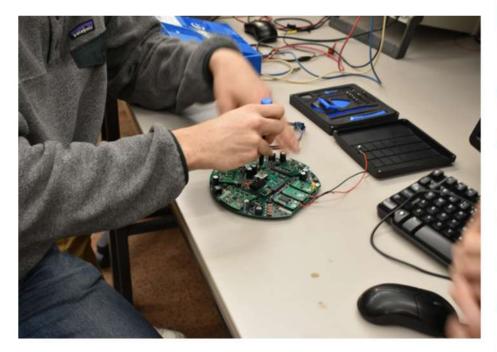
We strive to advance autonomous robotics through competitive innovation while empowering students with hands-on experience in engineering, programming, and teamwork.

#### GOALS

Our goal is to compete in RoboCup 2026 while laying the foundation for future engineers at SFU. By fostering innovation, collaboration, and technical excellence, we aim to create a lasting impact on the university's robotics community.

### OUR SUBTEAMS WHAT WE DO





#### **Mechanics**

The mechanics team designs and fabricates the robot frames and moving parts. They focus on optimizing weight, stability, and durability. Their role also involves assembling, testing, and maintaining the physical structures of the robots.



#### **Software**

The software team develops the Al and vision systems that power the robots' decision-making.

They implement reinforcement learning models, program collaboration strategies, and refine the software architecture for consistent performance.



#### **Electronics**

The electrical team designs and develops the circuit boards and power systems for the robots.

They integrate sensors, such as IMUs, and ensure efficient power distribution. Their responsibilities also include troubleshooting and repairing hardware issues.



#### **Firmware**

The firmware team develops the robots onboard control systems so it can physically execute software commands. They develop low level code that interfaces directly with the physical hardware so the robot can interpret complex instructions

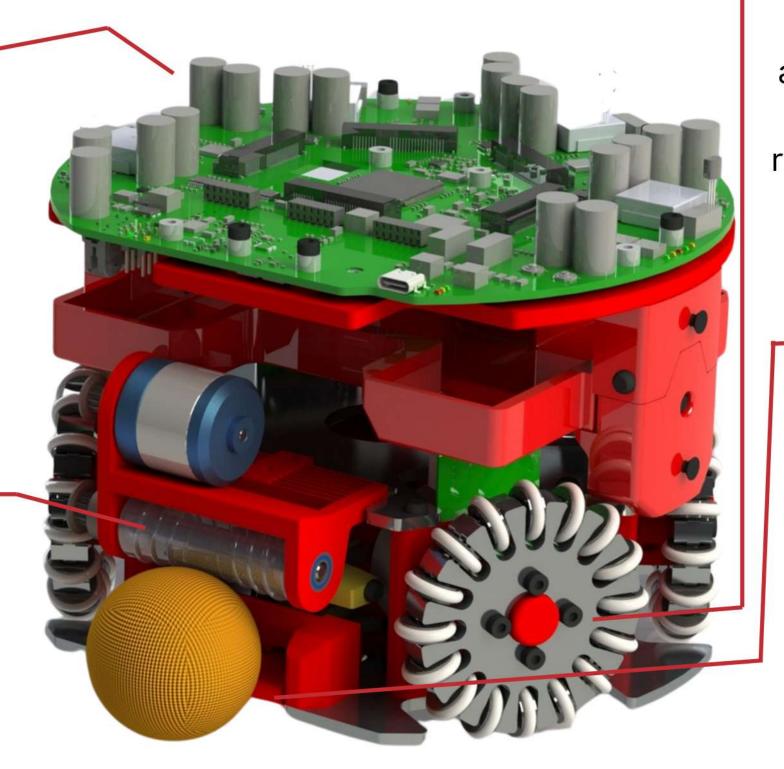
## OUR ROBOT

## Custom Designed Motherboard

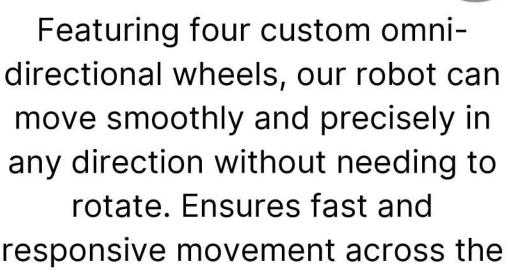
Orchestrates all electrical and communication functions. Built with modularity in mind and interfaces with several specialized daughter cards that handle key subsystems.

#### **Dribbler**

This allows the robot to move with the ball and reposition easily without losing possession. Ensures effective damping, reducing ball bounce and improving handling during rapid direction changes.



## Omni-Directional Wheels



#### **Kicker and Chipper**

field, giving the robot superior

control.

Equipped with two powerful solenoid-based mechanisms. The kicker delivers strong, fast ground passes and shots by propelling the ball with a burst of energy. The chipper, mounted at a slight angle, allows for lofted passes or shots that can travel over defenders.



**KEY MILESTONES TOWARD ROBOCUP 2026** 



#### Summer

- Complete robot fleet assembled and tested
- Full-sized field setup fully operational
- Firmware optimized for maximum stability
- Basic simulated gameplay successfully executed.
- Friendly match against local team to assess performace

#### **Fall**

- Ongoing testing and performance enhancements
- Gameplay strategy and system reliability finetuned

#### **Winter-Spring**

- Robots fully integrated and operational
- Software optimized for rapid, adaptive decisionmaking
- RoboCup 2026
   qualification process
   initiated.

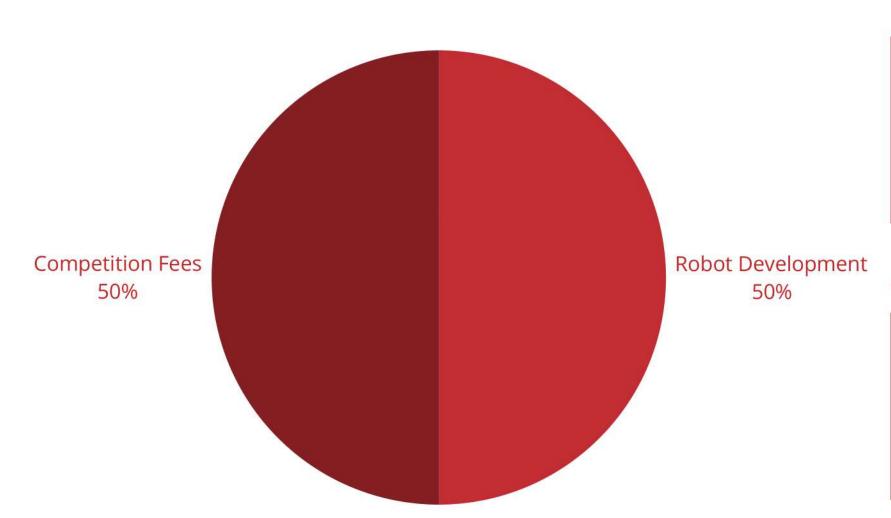
#### RoboCup 2026

- Competing in Incheon, South Korea.
- Debuting SFU Robot Soccer in the SSL league



# FUNDING OUR FUTURE





#### ROBOT DEVELOPMENT

50%

The majority of our budget is dedicated to designing, building, and testing our autonomous robots.

#### **COMPETITION FEES**

50%

This includes registration fees and other costs related to participating in national and international robot soccer competitions.



VATION

## SPONSORSHIP BENEFITS

Acknowledged and thanked at events

Logo on website and jersey

Acknowledgements on social media

Company logo on promotion posters

Company acknowledgement in newsletters

Inclusion in outreach events (Guest-speaking opportunities)

Distribution of company advertisement to team

			10
SUPPORTING SPONSOR \$500	COMMUNITY SPONSOR \$1,000	VISIONARY SPONSOR \$3,000	INNOVATION PARTNER \$5,000
<b>✓</b>			<b>✓</b>
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## CONTACT US:

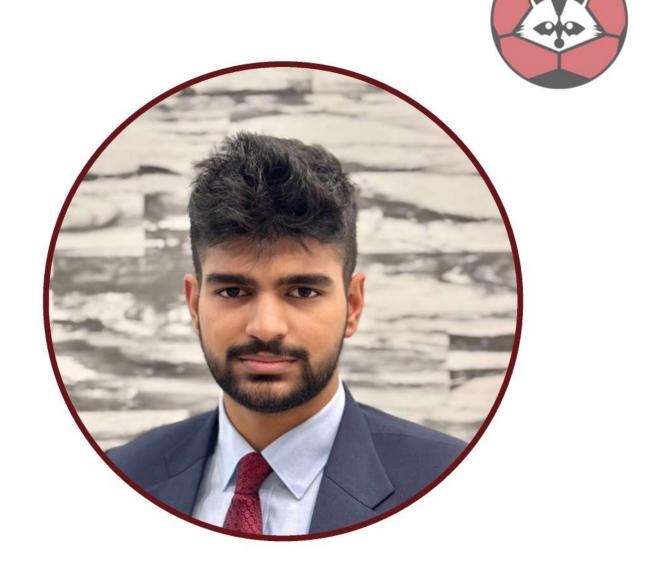
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Thank you for taking the time to consider SFU Robot Soccer's objectives and goals for 2025-26.

If you have any questions or are interested in partnering with SFURS, please do reach out to us.





