PARTNERSHIP PROGRAM 2022-2023

AUTONOMOUS ROBOTIC SOCCER CLUB

NAOVA

École de Technologie Supérieure
1100 Notre-Dame Ouest

NAOVA

ÉTS

ABOUT US

Naova is an international autonomous robotic soccer team, proudly representing Canadian skills in engineering at the annual RoboCup competition. Such a large project is remarkable and can only be made possible with our dedication and the support of our partners. Imagine how much more we can achieve by having you as a partner! Algorithms, artificial intelligence optimized for small computers, as well as individual and team strategies are our daily challenges to ensure we score as many goals as possible while avoiding penalties.

OBJECTIVES

- Implement machine learning more and more in multiple aspects of our project. The goal being to improve ball detection and opponent detection using our robots' vision.
- Increase the walking speed of the robots during movement.
- Creation of an event-based communication system.
- Development of a robust team strategy.
- Creation of a sound-based communication system.

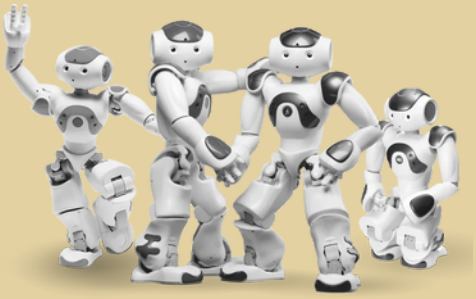
THE COMPETITION : ROBOCUP

Robotics and process automation have become major factors in all business sectors. One of the main issues affecting modern businesses is the shortage of qualified specialists in data processing, programming, IT, and software engineering.

The Naova scientific club from ÉTS participates annually in a robotics competition known as the RoboCup, an international scientific initiative whose goal is to make progress in the field of robot intelligence (not only for the industrial sector, but for all technology sectors).

The RoboCup is one of the largest international competitions of its kind, bringing together future specialists who are passionate about computer science, automation, and who voluntarily invest their time and effort to perfect themselves in their respective fields. Consequently, Naova ÉTS and its members are proud to be representing Canada as the first Canadian team in the “Soccer: Standard Platform League” division.

OUR PROJECTS



VISION

Perception of the environnement

We use machine learning algorithms to detect the ball, other robots, and various field elements.

WALKING CONTROLLER

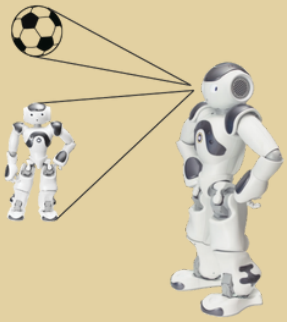
Conception of a walking controller

With the help of researchers at ÉTS, we are developing a walking controller for the robots. The controller helps to stabilize the robots during rapid movements.

BEHAVIOR

Define the strategies

We are working on team strategies such as passing skills, role management, and even more.



COMMUNICATION

Establish communication

We are developing inter-robot communication via WIFI connection as well as communication between the robots and the computer.

COMPETITION

Robocup!

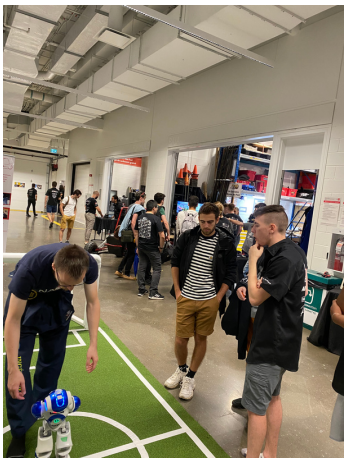
Every year we participate in the Robocub, the largest international robotics competition!

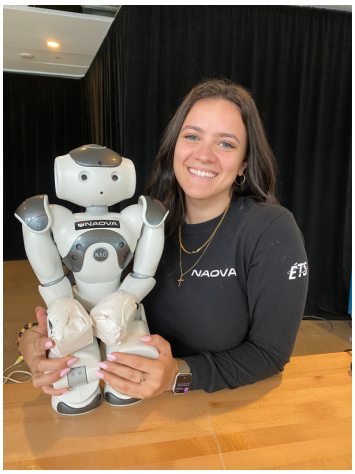
2022-2023 NAOVA TEAM

The Naova university scientific club aims for every member to surpass themselves in their abilities. Through their participation in daily club activities, the members acquire valuable knowledge to become better robotics specialists, a critical sector in multiple industries of our economy. The international competition's objective is the educational and technological advancement of the members and the club.

The 2021-2022 period allowed us to recruit multiple members after two difficult years due to the pandemic. During this period, we developed a good team bond. We have a lot of work ahead of us since we have to catch up on two years of missed work and advancement. This year, we finally succeeded in migrating our Nao robot V5 code to the new Nao V6 robot.

We had the opportunity to participate in the 2022 RoboCup, which took place in Bangkok, Thailand as one of the youngest teams in the competition.





OUR EVENTS

Naova wishes to give back to the community by participating in events to raise awareness and to encourage future generations to continue their studies in science and engineering. Our annual competition focuses on the future of robotics, and the technology we are developing will be used and optimized by future generations. This is one of the reasons why Naova is involved in different kinds of events to foster curiosity in younger students, to drive forward the future of robotics, and to give new students at ÉTS the opportunity to participate in a complex robotics project.

Here are some of the events in which we participated recently:

- Day camp activities
- Entrance day for the new students at ÉTS
- Celebration of the ÉTS clubs
- Recognition event for our partners
- 5-7 LOG-TI and GOL-GPA

PARTNERSHIP

Since we work in a sector in full development and in a division of the competition that requires specific robots, we require periodic financial support to help us move forward with our project. The majority of our sponsorships help us pay for our robots, which are the center piece of our club. These robots are sold by a single supplier, and we cannot manufacture them ourselves, which is why our main needs are financial funding. The rest of our sponsorships help us with the cost associated with displacements to our international competitions which are quite costly.

To succeed in these technological advancements, we acquired partners from the business community. By participating, you encourage future engineers in their academic and professional development. Your contribution will give you the benefit of an advantageous visibility within the student population of ÉTS as well as in the robotics community. Our club offers the opportunity to support a dynamic team that will perform thanks to your encouragement in a key sector of the industry. Our proposed partnership has many corporate benefits. By supporting the club with a sponsorship, you benefit from a unique visibility program (see the Appendix at the end of this document). In the case of a charitable donation, in addition to our thanks, you are eligible to a tax deduction credit.

Additionally, investing $3,000 or more in the next generation of engineers involved in technology may double your corporate reach. You will be presented with an "Award of Excellence" at the annual scholarship award ceremony of the ÉTS Development Fund. You will thus obtain additional visibility offered both by our scientific club and by the “Service aux diplômés et à la philanthropie”, our university foundation. To view details on the FDÉTS visibility, see the appendix at the end of this document. Your company will benefit from an outstanding brand image among the university community, students, graduates, ÉTS industrial partners, and the general public, as well as a simplified recruiting opportunity for trainees and engineers.

For additional details, please contact Mrs. Karine Georges, industry development coordinator at the office of the “Service aux diplômés et à la philantropie” by email at karine.georges@etsmtl.ca or by phone at (514) 396-8952.

VISIBILITY SCALE

	Bronze ≥ 500$	Silver ≥ 1500$	Gold ≥ 3000$	Platinum ≥ 5000$	Diamond ≥ 7000$
Letter of thanks					
Your logo on our partnership banner displayed at our events and competitions					
Your logo, with hyperlink, on our internet web partnership section					
Thanks and a mention in the articles published on our website and our social media profiles					
Your logo on our promotional clothing worn during our competitions					
Your logo on our robots					
Prix d'excellence and visibility from the SDP (> 3000$)					
Your logo on the main page of our website					
Your logo on the shirts of our robots					
Distribution of your promotional documents during club events					
Primary sponsor (Benefits to be discussed with the team)					

LINKS AND INFORMATION

To sponsor Naova : Sponsor form

To make a donation* : Donation form

Service aux diplômés et à la philanthropie, fdets@etsmtl.ca

Phone: (514) 396-8990

Naova : naova@ens.etsmtl.ca

*: DONATING MONEY OR EQUIPMENT MAY QUALIFY FOR AN OFFICIAL CHARITABLE DONATION RECEIPT. HOWEVER, IT MUST HAVE BEEN DONE VOLUNTARILY, BE THE SUBJECT OF NO CONTRACTUAL AGREEMENT AND GIVE NO ACCESS TO ANY BENEFIT, NEITHER FOR THE DONOR NOR FOR A THIRD PARTY. AN OFFICIAL DONATION RECEIPT COULD PROVIDE ACCESS TO NON-REFUNDABLE TAX CREDITS ACCORDING TO THE LAWS IN EFFECT AT THE TIME OF THE TRANSACTION. THIS MENTION IS FOR GUIDANCE ONLY AND CAN NOT BE CONSIDERED AS A GUARANTEE OF TAX DEDUCTIONS WHEN FILING YOUR RETURNS. FOR MORE INFORMATION, VISIT THE CANADA REVENUE AGENCY WEBSITE AT HTTP://WWW.CRA-ARC.GC.CA