PIC number *:	**951668747**
ID Code	E10131490
Full name of the organisation in Latin characters :	Scuola di Robotica
Business name :	Scuola di Robotica, Associazione Culturale
Registration date :	Registrata a Genova, Registro Atti Pubblici: Genova, n. 1039/1 del 16/03/2001
Registered address	16121 Genova, Italy
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Non Profit Organisation : **(Mark Yes or No)**	yes

Type of organisation * :	**no profit**
Title * :	Dr. Eng.
Family name * :	Micheli
First name * :	Emanuele
Department / Faculty :	
Role in the organisation * :	President and Legal Responsible
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Who we are

Scuola di Robotica (School of Robotics) is a no-profit Society appointed as Educational and Training Center by the Italian Ministry of Education, Research and University. A Committee consisting of robotics scientists and of scholars in Humanities has instituted the School of Robotics (2000). The aim of the School of Robotics is applying service robotics in contexts where it is useful to improve the quality of life. Another important mission of School of Robotics is to ensure that young people use digital and robotic tools in a conscious, ethical and useful way. For this reason, we have been organizing robotics and digital contests among young people for years. These contests always have useful objectives for others, for example, to program a robot to help the elderly; or to support learning for young people with disabilities.

Over the past 20 years, School of Robotics has been committed to integrating Robotics into the Undergraduate Education from kindergarten to high schools, from Youth activities, VET areas to adult education. In these activities, robotics is not as an aim but a tool for:

Helping young people in enhancing digital skills for their active life, studies, profession and to understanding today's world;

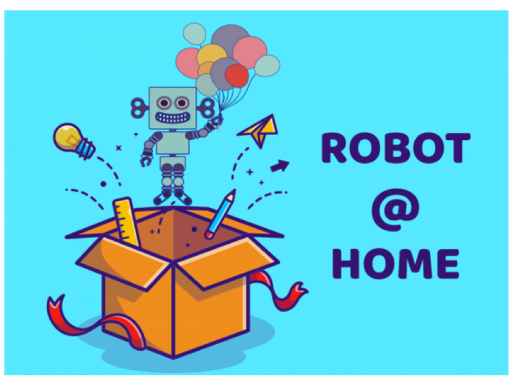
Providing continuous refresher courses for young tutors and teachers;

Assisting high school graduates to select their career and find a job;

Sustain Gender Methodology in STEM Education; 5)

Assisting companies and the workforce to keep abreast of new technologies;

Support the Special Need Education.



In 2008 Scuola di Robotica became Regional Center of the project “Roberta, girls discover robots”. Since September 2009, the Association has been included among the subjects that offer training of School Staff-Training Body. This means, among other things, that “the training initiatives of the accredited or qualified subjects are recognized by the Administration and entitle, within the limits of current regulations, to the recognition of exemption from duty for the school staff who participate”.
Scuola di Robotica is a partner in the FIRST LEGO LEAGUE; is a National Ambassador for the educational use of the NAO humanoid and national organizer of the NAO CHALLENGE. It is member of the High Level Advisory Group of the European Center for Women and Technology; National Contact Point of the European Robotics Week.
School of Robotics carries out these activities it in cooperation with Stakeholders in the solidarity and training and education areas, with the School of Robotics nationwide network started from the Robot-in-the-Classroom project (in Italian, Robot@Scuola), which was originally funded by the Italian Ministry of Education (2005) and that we sustained also at its conclusion.

School of Robotics was the educational institution called the National Research Council (CNR) to promoting the dissemination of the E-Robot and E-Robot 2 missions of the CNR Robotlab, organizing many *Living Science* experiments, specifically structured for students.

Methodology
School of Robotics provides for the v dissemination of information concerning the results of the R&D in the fiel complementary developments of other disciplines (Artificial Intelligence, Neuroscience, Philosophy, Psychology, Applied Ethics, Education).
We are committed to correcting fake news about robotics and ICT and providing accurate, fact-based and expertly documented information and comments.

Scuola di Robotica has been key in promoting Roboethics (Ethical, Legal and Societal Aspects in Robotics - ELSA) and it was the ELSA Referee for the European Action CARE (Coordination Action for Robotics in Europe). School of Robotics is deeply involved in the study of the complex interaction between Robotics and Society, and is supporting the international project for the development of Roboethics.
It is a member of European Centre for Women and Technology (ECWT). It is the National Centre of the Project Roberta, Girls Discover Robot; Regional Partner of the FIRST® LEGO® League (FLL); it is the National Coordinator of EC euRobotics Week. It is the National Organizer of the NAO Challenge and, on behalf Italian Ministry of Education, of Olimpiadi di Robotica Contest for secondary school teams.
In the last 4 years Scuola di Robotica has created and promoted work related programs for students participating in NAO Challenge and First Lego League. In 2020 the Work related program TechFuture 2030 is involving more then 80 secondary school teams in project based activity related to point 3 of 2030 Agenda.

Ongoing Research and Projects:
Vertical Integration of Educational Robotics in K-12 Education (by way of standard robotics kits; artifacts; an open environment in which students are able to design their own program for a robot)
Gender Education: Girls Discover Robots
Inclusive Education: Educational Robotics for kid with Special Needs (autism, cognitive impairments, in collaboration with several Autism Research Centers in Italy)
Development of Educational App’s
Responsible use of the Internet and of the New Media.

Devices and Robotics kits used and developed:
Lego kits (WeDo, EV3)
Aduino, Halocode, programming breadboard
Training Drones
Underwater robots
Humanoids robots (NAO; Pepper, Sanbot)
3D Printing devices
Artificial Intelligence, app’s, machine learning.
The main expertise that the School of Robotics pivots around the experience of 20 years of Educational Robotics Projects implemented in cooperation with ICT companies. School of Robotics has managed activities devoted to youth career and vocational guidance; to girls in STEM’s; to young people with Special Needs. These skills are tools - not final aims - for young people to cope with current and future professions and careers, whatever their jobs would be, either in ICT or in any other field. Today, ICT skills are unavoidable and instrumental.

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Educational robotics and Coding
Educational topics

This list of topics can be declined and modulated by school, higher education vocational and youth call types.
On Youth School Robotics has much less experience, and no ongoing projects.
Similarly, they can be programmed for primary, secondary and undergraduates.
They refer to the use of educational robotics and coding, as well as to the association of technological tools in Media Literacy projects.

Educational robotics
These educational technologies (kits at various school levels) promote different skills and can also be used in informal and non-formal education.
They can be used effectively for:
SEN (Special Educational Needs) students and for any inclusion activity.
They are very useful for professional development.
They are successfully used in gender education to promote girls and women in STEM fields.
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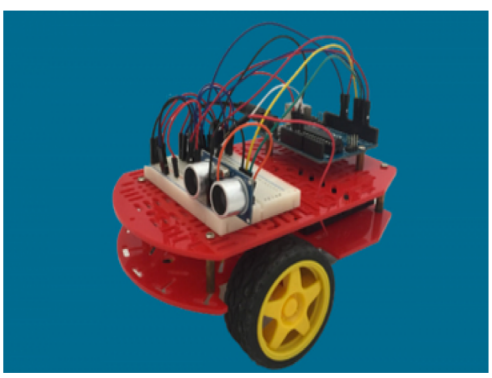
They are successfully used in gender education to promote girls and women in STEM fields.
Educational robotics can be associated in projects dedicated to the Humanities to study the convergence of fields, or to apply digital technologies to subjects in psychology, language, history, and of course all scientific subjects.
Computational and algorithmic thinking in kindergarten and primary schools through unplugged methodologies.



Coding and app design
Some examples
In a national project dedicated to the responsible use of social and new media for high school students, as well as workshops on the responsible use of social media, we worked with a group of students to create an app dedicated to the topic.

Use of free software with Scratch and others to promote computational thinking from primary school onwards.
Assistive robotics
Use of free software with Scratch and others to promote computational thinking from primary school onwards.

Design and production of robotics kits
We use Arduino and Arduino like breadboards to produce turnkey robotics kits (mobile, underwater, arms,..)

Dissemination Channels
The School of Robotics has developed excellent dissemination skills at local, national and European level.
At Liguria regional level, we have contacts with youth organizations, schools, vocational training bodies, parents' associations and Youth NGOs: At national level, trough the Robot@School tree hundred schools network; our website and newsletters; stakeholder, media and official institutions; in Europe, official events of ECWT, euRobotics Week, Euro Code Week, First Lego League, NAO Challenge.
Facebook Account: 33.500 followers

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Staff

School of Robotics is staffed by 14 employees who hold undergraduate and graduate degrees in a variety of disciplines, from engineering to physics, philosophy, computer science and social sciences.
Transdisciplinarity is an important feature of School of Robotics.
Among our collaborators:

Emanuele Micheli

He is the President. Graduate in Mechanical Engineering, University of Genoa, Italy, in 2004 with a thesis on the modular worm robot. In his first research activity, he worked on rescue robotics.
He worked as a designer for Telerobot, where he followed a humanoid project. For the School of Robotics he was responsible for the organization of the Robot@School Network founded in 2005 by the Italian Ministry for Education. Project Manager of the Regional Center of "Roberta goes EU" in Italy. In recent years he organized a considerable amount of teacher training courses and since 2009 he has been collaborating with the University of Genoa (for Industrial Design) on a project on Design and robotics.
He organizes and coordinates educational projects on underwater robotics from high school level to university. From 2014 he is a Lego Academy Certified Teacher.

Fiorella Operto

Educated in Philosophy, she is the vice President of the School of Robotics. She collaborated with the Italian Research Council (IAN and IEIIT Institutes) on the social impact of Advanced Robotics applications. In 2000, with robotics scientist, Gianmarco Veruggio, she founded the School of Robotics Society. Operto contributed to the definition and development of Roboethics (Ethical, Legal, and Societal Issues in Robotics). In 2006 she was Reference Person for "The Roboethics Roadmap", a project funded by the European Commission's EURON Robotics Network; and in 2007 co-organized the EU funded Euron Roboethics Atelier. She was involved in European Action "CARE". She is a Member of the high-level Advisory Committee for ECWT (EU European Centre for Women&Technology), Consultant and member of The Open Roboethics Initiative.

Davide Canepa

High School diploma in Electronics (2008). Since 2008, he collaborates with the School of Robotics as program developer and educational robotics expert. Certified LabVIEW, LabVIEW for robots (2010). Design and programming of off line robotics arm cells. Competent in using programs such as Kuka Sim Viewer, Kuka Sim Layout, Kuka Sim Tech, Kuka Sim Pro, KUKA.OfficeLite. Expert in using Inventor Full Version for 3D printing. App designer and developer for marine robots, drones, mobile robots. App designer and developer for iOS. Advanced use of Arduino breadboardv and its application for robotics, domotics, App's. Responsible of the project "App The Island", where he designed the App to be used in Italian Marine Protected Areas (funded by MedPan European Society). Designer and developer of BYOR robotics kit and BYOR App (one of the first classifies by Apple).

Sandra Meloni

Bachelor's degree in Biological Sciences, Università degli Studi di Parma – Facoltà Scienze Matematiche Fisiche eNaturali. Pedagogical High School Diploma. Robotics Laboratories workshops in schools (age form pre primary to secondary school) and extracurricular activities (2014 - today). obotic contest Coordinator:

- FIRST® LEGO® LEAGUE ITALY and JrFIRST® LEGO® LEAGUE
- "NAO Challenge" - Italian championship.
- Olimpiadi di Robotica, Italian Robotic Contest organized by Italian Ministry of Education

Teacher Trainer in Educational Robotics; Teacher training courses for pre-school, primary and secondary school teachers. Primary and secondary school Teacher. School-work alternation projects Coordinator. Coach Team Firestorm in First Lego League Italian Contest.

Luca Gilardi

After technical studies in Electronics and Telecommunications, I got a degree in Physics at Genoa University. Interested in the industrial applications of the sciences, and on the importance of the use of technology
to teach. Since 2011 I am involved in educational robotics teaching and science dissemination. He worked as a collaborator in teaching and science sharing projects with some entities, including Scuola di Robotica, Associazione Festival della Scienza, MadLab 2.0. From the beginning of 2019, he is a full-time employee in Scuola di Robotica, where he deals with projects of educational robotics and science dissemination, organizing, and holding classes to students and teachers. In 2015, I obtained the Lego Education Certification.

Michela Bogliolo

Born in 1995, she is graduate in Biomedical Engineering, University of Genoa, Italy, in 2019 with a thesis involving the application of a humanoid robot Pepper with the figure of caregiver, demonstrator and exercise controller in training sessions in hospital for elderly people.
She is working on projects that involve the design of low cost 3D prostheses (E-Nable) for upper limb, for children and adults born with malformations or who have undergone amputations of part of the limb.
On this occasion she works in Erasmus+ project 'We are the Makers', which aims to introduce 3D printing, Internet of Things (ioT) and interactive object design concepts in schools to create and print socially useful objects.