Discover new horizons for education and research

Robotics represents the fast growing segment of advanced technology used in both education and research.

NAO Evolution is the ideal companion for teaching Robotics as well as STEM (Science, Technology, Engineering, and Math) topics to all levels, from secondary to higher education. By using NAO, teachers and researchers will appreciate and investigate multiple capabilities through this platform.

ATTRACTIVE PLATFORM • FULLY AND EASILY PROGRAMMABLE • HIGHLY INTERACTIVE • MULTIPLE SENSORS ONBOARD CONTROL • READY TO USE
FOR TEACHERS
Increased student engagement, female and male alike
Enhanced effectiveness in reaching teaching goals
Cross-curriculum, project based, hands-on learning

FOR STUDENTS
Connecting theory with practice through hands-on tests
Fostering teamwork, project management, problem solving and communication skills
Inspiring a higher level of motivation and interest for technical career paths

FOR RESEARCHERS
Ideal test platform for conceptual and theoretical models
Autonomous companion for hands-on experiments
Intuitive software environment with multi-language programming

With this companion everything is possible.
SECONDARY EDUCATION
Discover algorithmic, boolean logics basics or and object programming
Encourage creativity by designing human-like animations
Understand control laws by analyzing sensors and joint data
Develop projects around NAO’s interaction with its environment

HIGHER EDUCATION
Experience enhanced object and speech recognition capabilities
Explore advanced human-robot interaction
Create complex behaviors by mixing vision, motion and audio
Develop projects such as writing or playing manual games

RESEARCH
Research on human robot interaction / perception and cognition
Research on navigation, localization or locomotion
Create advanced modules by using APIs
Explore new avenues in other cognitive sciences

Let your imagination run wild!
Program your NAO according to your needs

CURRICULA
Experiment new ways to teach with NAO
A comprehensive textbook, made of modules and exercises, recognized as top introduction to robotics. A practical tool for different levels: from secondary school to higher education. A large range of topics as computer science, mathematics, mechanics, matrix, transformation, video, and more!

MONITOR
Access high precision data from NAO’s sensors and actuators
A desktop application allowing measurements and graphical data from NAO’s sensors and joints. You can better analyze how NAO responds to different movements.

SDK
Develop incredible behaviors by embedding your modules
A user-friendly and well documented SDK which allows you to embed the modules you developed into your robot to give him more capabilities and intelligence. Our SDK is compatible with many robotics development platforms and languages (C++, Python, Java, MatLab...)

SIMULATOR - WEBOTS
Testing your design in a 3D workspace
The perfect software to accompany your class or research: interfaced with Choregraphe, it is a safe place to test programs on NAO in a simulated environment before applying them in the real world.

CHOREGRAPHE
Program impressive behaviors with a simple drag and drop of boxes or complex coding
An advanced software package that makes it intuitive to program NAO using a drag and drop interface, which simplifies the programming for new and advanced users alike.
NAO, the complete platform for education and research needs

- Recognizes clearly people and objects
- Tracks perfectly using its whole body
- Uses new extractors for people perception
- Talks in an expressive and appropriate way
Discover exclusive testimonials

— Mike Beiter, CS teacher, Central Erie school district, PA, USA

For our research it has proven crucial, that NAO has an appealing design. The cute appearance along with the speech synthesis capabilities allows us to easily initiate conversations and human-robot interactions.

Heni Ben Amor (Doctor), Institute of Computer Science, Freiberg, Germany

— Andrew Turpin PhD, Associate Professor, The University of Melbourne, Australia

I had students from our nursing and carpentry programs beating down my door for an opportunity to work with NAO. These students were captivated by the humanoid robot in a way that traditional robotics platforms and computer software simply could not duplicate.

— Mike Beiter, CS teacher, Central Erie school district, PA, USA

Our students are engaged much more quickly and deeply using NAO, as opposed to screen-based computers. You can tell by their expressions as they see the programs they created really come "alive".

Mike Beiter, CS teacher, Central Erie school district, PA, USA
Making interactive robots for the well-being of humans

Founded in 2005 by Bruno Maisonnier and now established in France, United States, China and Japan, Aldebaran Robotics designs, produces and commercializes humanoid robots with the aim of contributing to the well-being of humans. Today, over 5,000 NAO are in use throughout the world as research and educational tools in more than 70 countries around the world. Aldebaran Robotics counts more than 400 people, including 40% of R&D, who are involved in the development of its robots.

www.aldebaran.com