



Autism Solution for Kids

An Assistant for Teachers, a Friend for Kids

ASK NAO



NAO at Topcliffe School in Birmingham, UK

Mission

The ASK NAO initiative, created by Aldebaran Robotics, shapes the special education classroom of tomorrow by offering teachers a user-friendly robotic assistant to support their daily requirements and helping children with autism reach new levels of greatness.

Background

The ASK NAO initiative was sparked after noticing how much children with autism are naturally attracted to technology. NAO's humanoid shape allows him to be the perfect teaching tool to help open a child's world up to humanity's social universe. This ideology has since been explored and confirmed through an ever-growing quantity of scientific research pioneered by some of our prestigious customers, including University of Notre Dame, Vanderbilt University, and the University of Connecticut.

Autism Statistics

- Today autism affects 1 in every 88 children and 1 in every 54 boys
- Autism is the fastest-growing serious developmental disability (10-17% annually) and about only 50% is explained by a better diagnosis
- There is no medical detection or cure for autism
- Autism costs a family an average of \$60,000 a year
- 25 hours of behavioral treatments per week are needed to be really efficient

Aldebaran Robotics

Founded in 2005 by Bruno Maisonnier and now established in France, the United States, and China, Aldebaran Robotics designs, produces and sells humanoid robots in order to contribute to the betterment of humankind. There are currently more than 4,000 NAO robots operating in schools and universities in more than 70 countries worldwide for education and research.

Aldebaran Robotics has a team of 400 people, 40% of whom are engineers and doctors, involved in developing and producing its robots. NAO is currently the most widely used humanoid robot in the fields of education and research. NAO is also well on its way to becoming a robotic companion for individuals.



NAO robot

For further information about Aldebaran Robotics, please go to: www.aldebaran-robotics.com

ASK NAO Initiative Overview

Aldebaran Robotics launched the ASK NAO initiative to assist teachers in their classrooms and help children with autism in reaching new levels of greatness through robotics. The initiative was formed by customizing NAO, a humanoid robot, with a number of behavioral applications to foster the development of social and learning skills in children with special needs. To help ease the integration of NAO into classrooms Aldebaran Robotics created a user-friendly application manager and online interface to support teachers and answer their core special education teaching needs as well as take care of day-to-day tasks.

To anchor this initiative to society and truly shape the special education classroom of tomorrow, Aldebaran Robotics call on those who are most intimate with autism and technology to join an innovative community and permanently “reinvent” existing methods to help guarantee a successful implementation of NAO as well as drive special education into the future.



NAO playing with children at Topcliffe Primary School, Birmingham

For more information please contact Alia Pyros: apyros@aldebaran-robotics.com

NAO

NAO, Aldebaran Robotics' flagship product, is a programmable, autonomous and constantly evolving humanoid robot able to run educational, entertaining, and daily life assistance applications.

The benefits for the children are its predictability, which reduces their natural anxiety, its tireless features, its judgment free demeanor and its clean design which leads to lower amount of sensory information to process. This enables NAO, a humanoid robot, to act as the perfect bridge between the human and technological worlds, linking autistic children by encouraging social interaction and learning as well as increasing confidence and self-esteem.

APPLICATIONS

Children with autism are unique, with their own personality, their own interests, their own world... Even if many of them are attracted by robots, they still need personalized education. NAO is an innovative aid for teachers intended to maximize the effectiveness of teaching sessions/programs through a number of specific exercises.

Aldebaran Robotics has collaborated with teachers and autism experts to develop customizable, semi-autonomous educational applications for NAO inspired by various autism approaches and models (ABA, PECS, TEACCH, DENVER, SCERTS).

The aim of these applications is to help children develop social and learning skills through encouragement and rewards, making it possible to positively stimulate them, give them confidence and help them move toward greater independence.

Interaction with NAO is translated through playing games. The applications include behaviors responding to a large spectrum of learning goals, such as turn taking, guessing emotions, communication, following instruction and more. These behaviors become fun with NAO and include interactive games and activities with NAO. Sessions with NAO are personalized and the tasks are adapted to each child's learning goals, motivators, internal states, and personality to create a perfect match.

INTERFACE

In addition to the NAO robot, ASK NAO solution caters to the teacher with a web portal which accomplishes the core requirements of special education in the school environment. It allows teachers to effortlessly define a personalized teaching program for each child consisting in creating custom profiles, tracking individual child's progress, and managing teaching sessions for each student. Accessible from anywhere, the interface also facilitates communication channels between the various education professionals and parents in order to gain a better understanding of each child. By strengthening the network around the child the child will have the most potential for success.

The future of special education is NAO. For more information, please visit: www.asknao.com

