



Abstract

Nao is a humanoid robot developed and manufactured by Aldebaran Robotics, a French company based in Paris, France. The demonstration will show how the robot interacts autonomously and the capacities of high level programming through Choregraphe software.

Nao stands tall in all points amongst its robotic brethren. Platform agnostic, it can be programmed and controlled using Linux, Windows or Mac OS. The hardware has been built from the ground up with the latest technologies providing great fluidity in its movements and offering a wide range of sensors. Nao contains an open framework which allows distributed software modules to interact together seamlessly. Depending on the user's expertise, Nao can be controlled via Choregraphe®, our user friendly behaviour editor, by programming C++ modules, or by interacting with a rich API from scripting languages.

In addition to the high level API which allows users to make Nao walk and balance, advanced users can take advantage of low level access to

sensors and actuators and can, if they wish, replace our code with custom adaptations. In order to allow users to validate motion sequences, simulators are available for Microsoft Robotics Studio and Cogmation Nao Sim.

Company profile

ALDEBARAN ROBOTICS was founded in 2005 in Paris to develop and market humanoid home robot companions.

Since May 2008, Aldebaran is shipping its first generation robot. Nao is a 58cm tall friendly robot that includes a computer and networking capability at its core. Delivered with a full set of development tools, NAO addresses the needs of universities including RoboCup players and research labs around the world. It's an evolving platform, which is unique in its ability to handle multiple applications.

Today, Aldebaran Robotics has decided to help ambitious educational projects thanks to our Educational Partnership Program (EPP). We now offer a wide range of products to higher education. Our ambition is to encourage students to embrace scientific studies and to create new jobs based on our unique and innovative tool.

With EPP, in exchange for visibility and an active role in the NAO Education Community, you can benefit from special services and offers.

Aldebaran's regroups more than 100 people including +45 first class engineers and PhDs involved in R&D and production. We are currently opening subsidiaries in Shanghaï and Boston so as to be closer to our customers.