

**Abstract:**

This presentation will serve as an overview of the humanoid robot Nao, developed and manufactured by Aldebaran Robotics SA, a young European company based in Paris, France. The live demonstration will consist in showing the robot interact autonomously and showing 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 behavior 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 Webots.

Company profile:

ALDEBARAN ROBOTICS was founded in 2005 in Paris to develop and market humanoid robots.

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. At the moment 500 Naos are spread around the world.

Today Aldebaran's regroups 90 people including +45 first class engineers and PhDs involved in R&D and production. In January 2008, Aldebaran Robotics raised Series A financing of EUR 5 million led by CDC Innovation alongside I-Source Gestion.