Speech Controlled, Independent Moving, Talking Robot using a FPGA Board

Ioan Paul CĂTUNA, Sabin Ioan SĂRMAȘ

Abstract

This paper presents the idea and the results obtained during the construction of an autonomously-moving robot, using the Nexys FPGA board. Robot control is performed by speech: single, voice-independent, isolated-word commands. The robot would be able to recognize the given command, perform the corresponding action, avoid obstacles in its path and 'speak', giving the user information regarding its state and the result of the last action.