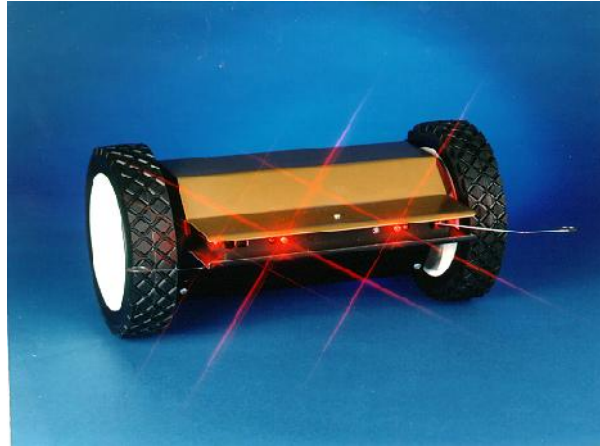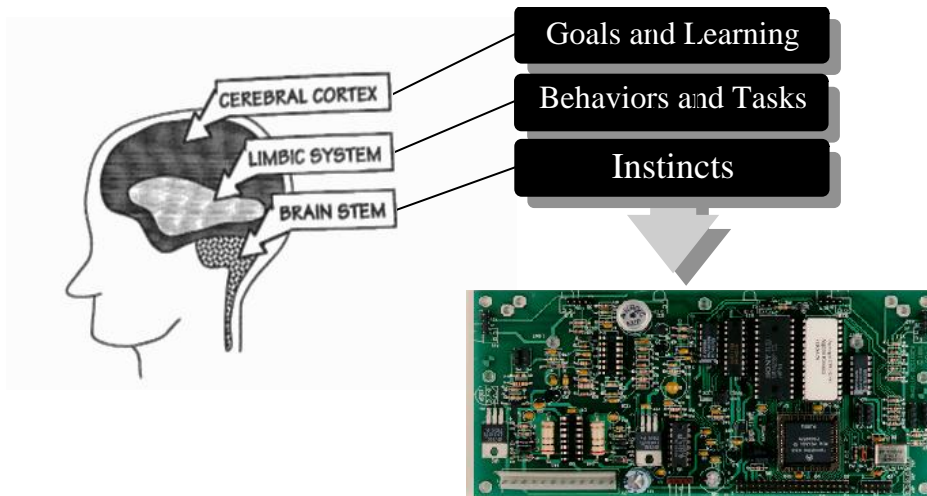# Explore the World of Artificial Intelligence
with
Whiskers^{tm} the Robot

Whiskers^{tm} emulates the three levels of the human brain in __real-time__

Goals and Learning

Behaviors and Tasks

Instincts

- **Easy to program, no programming experience required**
- **Durable all heavy gauge aluminum construction**
- **User can teach the robot new commands in English**

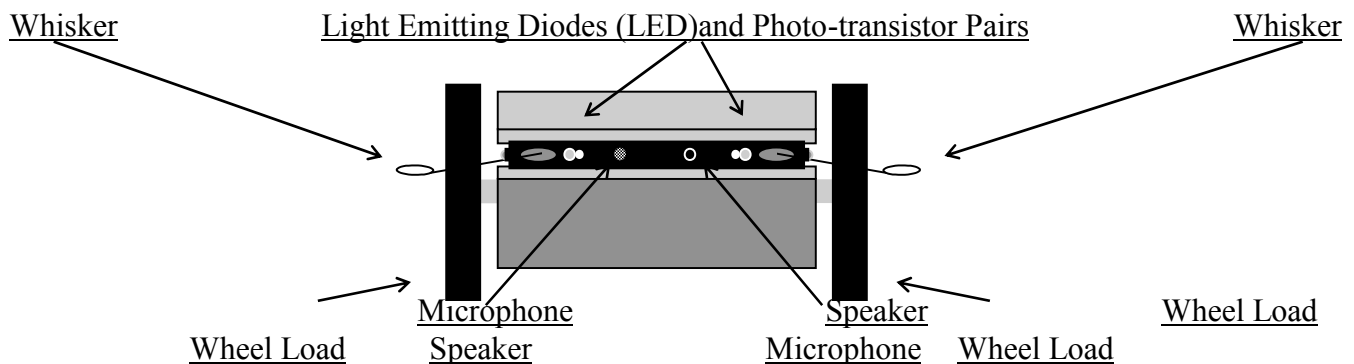# The Software Architecture is based on the three levels of intelligence found in the Human Brain...
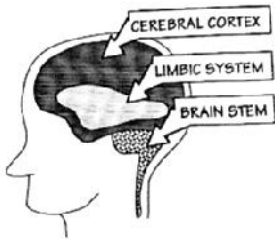
*Cerebral Cortex-*Physically the outer layer of the brain, which is characterized by the folds just under the skull. Functions include: Decision making, analysis, and dreaming. This is called the Goal Level in the intelligent operating system.

*Limbic System-*The gray matter found in the center of the brain controls human behavior such as breathing, hunger, etc. This is called Behavior Level. Real-time decisions are made and simple or complex actions are triggered.

*Brain Stem-*The base of the brain connected to the spinal cord and nervous system. This level controls our critical responses and instinctive behavior giving the machine common sense. This is called Instinct Level. Motor/sensor fusion at this level allows the machine to instantly react to its environment. The Behavior and Goal levels can change the way this level reacts at any time.

Simple to use-Imaging you and your students learning to program an Artificial Intelligence based robot in English! You already know his programming language: FORWARD 3 FEET STOP, LEFT PIVOT 90 DEGREES STOP, 500 LASER, BACKUP 2 SECS STOP, 80 LEFT SPEED, 40 RIGHT SPEED, and he will even avoid things automatically. These are actual programming commands, and you can even teach him new words(commands) yourself. Whiskers comes with a curriculum that has been refined by over one thousand schools around the world. Our users say that Whiskers is the most popular Technology Module in the classroom.

Whisker   Light Emitting Diodes (LED)and Photo-transistor Pairs   Whisker

Wheel Load   Microphone   Speaker   Wheel Load
Speaker   Microphone   Wheel Load

*Touching-*Whiskers give the robot the ability to touch objects around him.

*Seeing-*Four independent optical sensors use Light Emitting Diodes (LED's) and phototransistor pairs. They give Whiskers^{tm} the ability to see objects around him.

*Feeling-*Wheel load or drag is measured continuously to give the robot a sense of the terrain. It allows Whiskers^{tm} to sense objects the other sensors did not see.

*Speaking-*The speaker and software that controls it, gives Whiskers^{tm} the ability to make sounds just like other animals use for communication.

All you need is a personal computer, PC or MAC. You can even use an old computer you have like the original 8088 based PC or MAC Classic. The robot comes with a programming

cable, charger, software disk, and curriculum. Everything you need is included to get your students on the road to a high paying technical career.