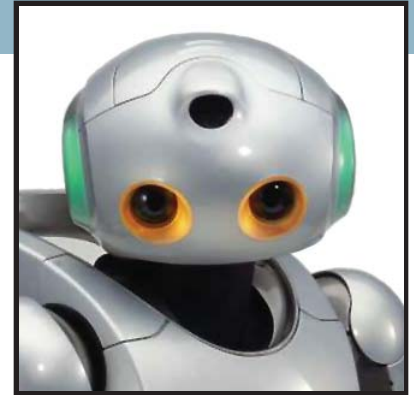


ARTIFICIAL INTELLIGENCE AND MOBILE ROBOTICS

The foliage is thick. It's heavy, in the way, and worst of all itchy. You stop in your tracks. SHHHH! You think to yourself. You only get one chance at this. You're on your hands and knees watching carefully, documenting with your eyes this naturally occurring phenomenon – ants engaged in swarm intelligence. Your research is vital to creating faster, more efficient Artificial Intelligence that will greatly affect everyday things – the Internet and telephone traffic, to name two. Your analysis between nature and AI through the use of mobile robotics will be the breakthrough to new possibilities.



Imagine – for a moment – the intrigue of your students as they explore the natural world to uncover the many uses of insect and mammal behaviors for real world applications.

Why Teach Artificial Intelligence

Artificial Intelligence is all around us; AI is growing into a very important career and influential technology in our lives. Besides the creation of useful intelligent systems, studying Artificial Intelligence teaches a new level of understanding of biology and animal behavior. Nature has some very creative and successful creatures; determining what behaviors make creatures successful gives the students important hints in creating the next generation of intelligent robots.

How We Teach

To make the curriculum easy to implement, all the necessary knowledge and skills are delivered through totally interactive software. Through text, pictures, animations, and digital video, students are led through the exciting world of mobile robotics. Due to the highly interactive and self-directed nature of our curriculum, each student is allowed to find their own pace. Regardless of the learner's motivation or learning style, students will find a new level of success with our innovative and engaging approach.

This curriculum was designed to support state assessments by addressing national math, language, science, and technology standards.

Skills for Life

Good life skills are made relevant through situations that have students examine their actions. Through interactions with their boss, co-workers, and customers, students learn what it takes to be successful in the real world. They discover the long-term benefits of making the choice to take pride in what they do.

Critical Thinking and Problem Solving

Employers want people who solve problems. Our projects lead students through analyzing, brainstorming, and creating solutions using the design process.

TEACHER'S RESOURCE CD INCLUDES:

- Videos that give the educator a “behind the scenes” look at each AI project
- Answers to student worksheets (and where those answers are found in the curriculum!)
- Rubric for project assessment
- Detailed list of addressed standards for math, language, science, and ITEA
- Educator's personal set of digital tutorial videos on programming mobile robots

SOME KEY CONCEPTS AND OUTCOMES

- Explain how insect and mammal behaviors help AI researchers create intelligent systems
- Understand and demonstrate the functions of sensors and outputs
- Explain the basic elements of a mobile robot system and its controller
- Create intelligent systems using the problem solving process
- Prepare an informational or persuasive oral presentation
- Understand and demonstrate how a robot control language works

CURRICULUM LENGTH

The curriculum has been designed for flexibility with two separate projects. The length of the curriculum is controlled by the educator and can run from 20 to 45 hours.

COMPUTER REQUIREMENTS

For Mac: OS X or later; 166 MHz Mac processor; 1 GB of hard disk space; USB port; 192 MB RAM recommended; headphones

For PC: Windows® 98SE or higher; 128 MB of RAM; 1 GB of hard disk space; CD-ROM; sound card; minimum 1024x768 screen resolution; headphones

To avoid confusion and to get an accurate quote for your unique class and school, just give us a call – 877.828.1216 – or click on the “Get a Quote” icon found at the bottom of each curriculum page on our website.

Remember you're going to be talking to a developer and not a salesperson...that means no sales pitch, no commissions on the line – just the information that you need.



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