

Applied AI News

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Lear Astronics (Santa Monica and Ontario, Calif.) is combining neural networks with virtual reality to enhance its Autonomous Landing Guidance (ALG) system. Lear Astronics is using a neural network-based massively parallel coprocessor for real-time image processing in the ALG system, which enables commercial and military aircraft pilots to land in foggy conditions.

Researchers at Georgia Tech (Atlanta, Ga.) have created intelligent agent software called the Technology Opportunities Analysis Knowbot (TOAK) that provides profiles of the latest technological trends and opportunities. TOAK navigates through multiple networks and across diverse computer systems to perform specific search tasks for the user.

Hydromantis (Hamilton, Ont., Canada) has been awarded a contract from the Ministry of the Environment and Energy of Ontario to develop an expert system-based Integrated Computer Control System (IC2S). The main objective of the project is the development and full-scale implementation of an intelligent advisory system for operational control of a wastewater treatment system.

Barnert Hospital (Paterson, N.J.) has become a beta site for the study of virtual reality (VR) surgery. One of its doctors has already performed a laser-laparoscopic hernia repair while using a VR system. Using miniature cameras and light sources, physicians are able to create a video image of the operative field, which they watch on a TV monitor. Watching the monitor, they can manipulate the laser, and thanks to VR, the physicians are able

to "enter" the surgical area, as if they were actually there.

FuziWare (Knoxville, Tenn.), a developer of fuzzy logic-based software tools for business and engineering solutions, has received a patent from the U.S. Department of Commerce Patent and Trademark Office for its FuziCalc product, a fuzzy spreadsheet data processing system. The claims in the patent cover various fuzzy number interface elements as well as the entire fuzzy number processing system.

AMSCO International (Erie, Pa.), a supplier of hospital decontamination and surgical equipment, has implemented a virtual reality application for technical design presentation. The application, designed by VR developer Summit Graphics (Bethel Park,

David Blanchard is the author of *Intelligent Systems: Applications & Analysis*, a comprehensive resource guide, market analysis and directory of the entire advanced computing arena. The book examines in detail all the key AI technologies: expert systems, neural networks, fuzzy logic, virtual reality, speech recognition, artificial life, and more. Price: \$395. Contact Lionheart Publishing Inc., 2555 Cumberland Parkway, Suite 299, Atlanta, GA 30339, (404) 431-0867 ext. 202, Fax: (404) 432-6969.

Pa.), allows AMSCO sales people to graphically present layouts of health care equipment in real-time to potential customers.

Texaco (White Plains, N.Y.), an international petroleum supplier, has installed a real-time process control system, based on expert system and neural network technologies, at its Puget Sound refinery. The system monitors various process parameters and sends control signals to the con-

trolled unit. Similar systems are being installed at other Texaco sites.

Hughes Missile Systems (Tucson, Ariz.) is providing intelligent character readers (ICRs) to Empire Blue Cross/Blue Shield (New York, N.Y.) to expedite the processing of medical claim forms. Empire will install the ICRs at its Yorktown Heights and Manhattan offices, where they will be used to process about 10,000 documents per day.

The Boston Museum of Fine Arts (Boston, Mass.) has developed a virtual reality recreation of the Egyptian fortress of Buhen, which was submerged under Lake Nasser when the Aswan Dam was built 30 years ago. The virtual fortress was created from a complex 3D model derived from archival information supplied by the museum's Egyptian Department. The fortress will be accessible to students, scholars, historians, archaeologists, architects, and anyone else interested in past civilizations.

Synaptics (San Jose, Calif.) has developed a human interface device that applied neural network-based mixed signal technology and is able to sense both a finger's position and pressure. The technology used in the device will allow individuals to interact with computers using touch, handwriting, and eventually vision and speech.

Xerox Special Information Systems (Pasadena, Calif.) is using expert system-based diagnostic software to increase the efficiency of service performed by its photocopier service personnel. Service personnel will now carry laptop PCs rather than numerous equipment manuals when they make service calls.