

Applied AI News

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Shell U.K. Exploration and Production (Aberdeen, U.K.) has implemented an advanced forecasting system for predicting oil field production. The expert system helped Shell achieve over \$1.6 million in cost savings for its Brent Field site within 2 months of implementation.

The National Research Council has awarded **Nestor** (Providence, R.I.) a grant to develop a neural network-based video sensor system, crossing-guard FOR RAIL. The system will be used to improve safety at grade-level roadway and railroad intersections.

Automobile manufacturer **Mercedes-Benz** (Stuttgart, Germany) has developed a virtual vehicle project, the VIRTUELLES FAHRZEUG (VRF), that allows potential car buyers to virtually customize and then experience in three-dimensional mode a fully rendered model of the car. Mercedes-Benz plans to establish three vrf test sites in Europe, North America, and the Far East.

American International Group (New York, N.Y.), an insurance provider, has automated its underwriting processes using a rule-driven application. The company's AI-QUIC (American International quality underwriting and information capture) system eliminates manual underwriting tasks and provides the ability to respond quickly to changes in the underwriting rules.

Robotic Parking (Leetonia, Ohio) has developed maps (modular automated parking system), a fuzzy logic-based system that simultaneously parks and retrieves multiple vehicles on one or more contiguous garage floors. MAPS is designed to increase parking space

availability and prevent cars from being damaged while they are parked.

Arvin Industries (Columbus, Ind.) is working with the U.S. Air Force to develop a neural network system that can determine the quality of noise in such vehicles as automobiles and aircraft. The neural network will help determine what exactly an annoying sound is and how it can be fixed.

Using virtual reality hardware and software, **Parke-Davis** (Morris Plains, N.J.) has been able to improve the molecular modeling research techniques it uses to develop new pharmaceutical products.

The **Department of Veterans Affairs Medical Center** (Dallas, Tex.) has developed an expert system called the EPILEPTOLOGIST'S ASSISTANT, which guides nurses in gathering patient histories. This system has helped cut specialty clinic costs by 40 percent.

Retail giant **Wal-Mart** (Bentonville, Ark.) has installed a voice-based order-filling system that has eliminated both mispicks and product labeling costs at its grocery distribution centers. The system, which includes portable speech-recognition terminals, as well as a wireless local area network and a built-in spread spectrum radio module, is scheduled for operation in all Wal-Mart's grocery distribution centers.

National Electronics Warranty (Sterling, Va.), a third-party warranty administrator, has added case-based-reasoning capabilities to its customer service call center. The intelligent solution is helping new customer service representatives solve problems

regarding 900 different types of product in more than 150 categories.

Deneb Robotics (Auburn Hills, Mich.) has been awarded a \$2.3 million contract from the National Institute of Standards and Technology (NIST) to develop the agent network for task scheduling and execution. This intelligent agent-based project is designed to improve existing factory-scheduling systems with a new task scheduling and execution system in which agents represent factory resources, systems, and jobs.

Cisco Systems (San Jose, Calif.), a supplier of network technology, is using intelligent-agent technology to integrate CD-ROM and online web information within a networked application. The addition of intelligent search-and-retrieval capabilities has led to a reduction in inbound calls at Cisco's call centers, resulting in significant savings.

First Databank (San Bruno, Calif.), a source of electronic drug information, has developed BESTDOSE, an expert system that configures drug dosing and prescription information using business rules. BESTDOSE is designed to provide physicians with patient-specific drug dosing information when they order medications.

Neural Computer Sciences (NCS) (Totton, U.K.) has been selected to develop the neural network technology for the European Union's Neural-Maine Project, which aims to simplify the application of condition monitoring to complex machinery. NCS will develop embedded neural networks that will help fuse multiple-sensor input into clearly targeted maintenance suggestions and fault diagnoses.

David Blanchard is the editor of *Intelligent Systems Report* (Cuyahoga Falls, Ohio; www.lionhrtpub.com), a monthly newsletter reporting on news and applications in the advanced computing arena.