

Applied AI News

The Lockheed Corp. (Calabasas, CA) and AT&T (New York, NY) have signed an agreement to jointly develop and market intelligent transportation systems. The two companies are responding to the Intermodal Surface Transportation Act of 1991, which calls for enhancing roadway capacity, safety, efficiency, and air quality through the development of intelligent vehicle highway systems. Electronic toll collection systems, traffic management systems, in-car navigational and route planning systems are among the systems being developed.

UK-based Empires Stores, a mail order company, has reduced the clerical work in its credit department by about 30%, thanks to the implementation of an intelligent system. The company has successfully automated the decision-making process for passing or rejecting orders referred by its performance scoring system.

VeriFone Inc. (Redwood City, CA), a vendor of transaction automation systems, has developed a retail point-of-sale device powered by an analog neural network chip. VeriFone's Gemstone Onyx check reader uses the I1000 chip, developed by Synaptics Inc. (San Jose, CA), to read virtually any check, even those that are wrinkled, folded or written over with pen marks.

HNC Inc. (San Diego, CA) has formed a group to provide its neural network solutions to mortgage originators, mortgage insurers and secondary mortgage market investors. The new Mortgage Products group will be responsible for developing and marketing a series of products which increase the speed, quality and consistency of mortgage underwriting and risk management.

Philadelphia Electric Co. (Philadelphia, PA) and the University of Washington (Seattle, WA) are jointly developing the Intelligent System Restoration Planning expert system. The system is designed to accelerate bulk electrical system power restoration in the event of a blackout, and

to reduce operator stress in such a situation.

Four companies—**Honeywell, Hercules Aerospace, Sheldahl, and 3M**—have received a first-year grant of \$660,000 from the US Department of Commerce for their joint development work on a neural network system. The companies will develop a generic sensor and control technology based on neural networks for application to complex material processing.

Tractor manufacturer **Caterpillar Inc.** (Peoria, IL) and Carnegie Group Inc. (Pittsburgh, PA) have signed a five-year, multimillion dollar, five-year agreement to develop a fully automated machine translation system for Caterpillar's technical documentation. The Automated Machine Translation (AMT) system, being developed with Carnegie Mellon University's Center for Machine Translation, will completely automate the translation of millions of pages of manuals distributed internationally by Caterpillar for its equipment. The system will eliminate the need to post-edit machine-generated documents in any of 11 major languages.

PMI Mortgage Insurance Co. (San Francisco, CA), a private insurer of residential mortgages, has begun implementing the Judgment Processing expert system at its underwriting offices nationwide. The expert system, developed by Cybertek-Cogentys (Dallas, TX), captures and leverages the decision-making abilities of an organization's experts, and is used for a number of financial services applications.

American NeuraLogix Inc. (Sanford, FL), a vendor of fuzzy logic products, and Samsung Electronics Corp. (Seoul, Republic of Korea) have signed a 10-year technology transfer agreement, giving Samsung manufacturing and usage rights to NeuraLogix's core AI products. The agreement provides for joint development of future AI devices.

Engineers at **Southwest Research Institute** (San Antonio, TX) have developed an engineering information retrieval program called the **Group Technology Assistant**, which introduces a graphical user interface to speed the classification of metal parts. The system is now in use by the US Air Force as well as in the development of a computer-aided processing planning system for the US Navy.

ERAAM (Malakoff, France) has developed the Traffic Data Management System (TDMS), an expert system that is currently installed at the Fos-Marseille harbor in France. TDMS integrates all available information and presents it on a color map display to assist port authorities in the management of maritime traffic.

Rosh Intelligent Systems Inc. (Needham, MA), a vendor of field service and maintenance automation expert systems, has signed an agreement with Lam Research Corp. (Fremont, CA), a supplier of semiconductor manufacturing equipment. Lam plans to implement Rosh's Computer Aided Intelligent Service (CAIS) to aid in the diagnostics, servicing and repair of the company's plasma etch systems.

Volvo, the Swedish automobile manufacturer, has developed a neural network application to validate engine performance. The neural network listens for engine sounds through a microphone, allowing a sound technician to address and correct the problem, rather than simply identifying it. The neural network also allows for greater consistency in the decision-making process.

David Blanchard is editor of *Intelligent Systems Report*, the monthly newsletter of applied artificial intelligence. For further details on the above stories, or to report information on other applications of AI, contact ISR at 2555 Cumberland Parkway, Suite 299, Atlanta, GA 30339, (404) 434-2187, FAX: (404) 432-6969. Subscription price: \$249 for 12 issues.