

Applied AI News

David Blanchard

American Airlines (Fort Worth, Tex.) has utilized speech-recognition technology to enhance its automated flight information system, DIAL-AA-FLIGHT. Using their normal speaking voice instead of pressing buttons on a touch-tone phone, callers can obtain up-to-the-minute flight arrival, departure, and gate information.

Bank of America (San Francisco, Calif.) has initiated a fingerprint-based smart-card biometric program that provides participants with access to online banking services. The biometric software matches the fingerprint image imprinted on a scanning device to an image supplied by the user and stored on the smart card's chip. If the fingerprints match, the user is allowed access to a special web page from which various transactions can be carried out.

Lockheed Martin Tactical Aircraft Systems (Fort Worth, Tex.) has undertaken the manufacturing agent-based emulation system (MABES) initiative, aimed at applying intelligent agents in a manufacturing environment that incorporates lean manufacturing principles. The intelligent-agent software can provide functions such as monitoring, analyzing, collaborating, and proactively responding to changes in the data it is processing.

Aughinish Alumina (Askeaton, Ireland) has implemented an expert system application to optimize throughput of alumina from bauxite ore. The expert system is used as a plant information system to monitor plant performance. The system recognizes unusual circumstances and can take preventative action before an event takes place.

ADHunter UK Ltd. (London, U.K.), a

consortium representing 60 percent of all newspapers circulated in the United Kingdom, has developed an intelligent agent-based classified advertising web site. The ADHunter system collects and indexes as many as 1 million automobile, help wanted, and property classified ads.

Heritage Mutual Insurance (Sheboygan, Wis.) is using intelligent software to improve its underwriting process. The company's rule-based paperless personal lines processing application automates the procedure for evaluating and issuing a variety of insurance products.

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

Teknowledge (Palo Alto, Calif.) has been awarded a contract by the National Institute of Standards and Technology to develop a COURSEWARE CONVERSION FACTORY. This intelligent web application will be an integrated software system for reengineering classroom-based education and training materials for distribution on the internet.

British Gas (Loughborough, U.K.) has adopted data-mining techniques to reduce the cost of its drilling operations. Data-mining software is used to

identify patterns and trends that are likely to result in down time on a drilling rig.

Cerro Matoso (Bogota, Colombia), an operator of a ferro-nickel mineral-processing plant, has implemented a real-time, fuzzy logic-based expert system for online control and optimization of its gas-fired rotary kiln. The expert system maintains a stable kiln temperature and has facilitated the standardization of control procedures.

Irvine Sensors (Costa Mesa, Calif.) has received a contract from the U.S. Army Space and Missile Defense Command to demonstrate the feasibility of an ultra-high-density interconnect to enhance its three-dimensional artificial neural network (3DANN) technology. The technology will be used to develop a "silicon brain" for the U.S. Army for potential application to ballistic missile defense systems.

Cooper Tire & Rubber (Findlay, Ohio) has implemented a genetic algorithm-based system to optimize its supply chain. The software will help the company increase its inventory effectiveness and manufacturing flexibility by balancing production across all Cooper Tire's manufacturing operations.

Fidelity Investments (Boston, Mass.) has deployed speech-recognition software to enhance its natural language-based trading and account management system. The fidelity automated service telephone (FAST) system is designed to provide as many as 250,000 calls a day from investors wishing to receive stock quotes; place trades for stocks, options, and mutual funds; and manage their accounts over the telephone using natural language.

The United Kingdom borough of **Newham, East London**, has deployed face-recognition software in a closed-circuit TV (CCTV) control room application called MANDRAKE. The MANDRAKE system automatically scans the faces of people passing the 144 CCTV cameras located around Newham. The system's objective is to reduce crime by searching for matches in a video library of known criminals stored in a local police database.