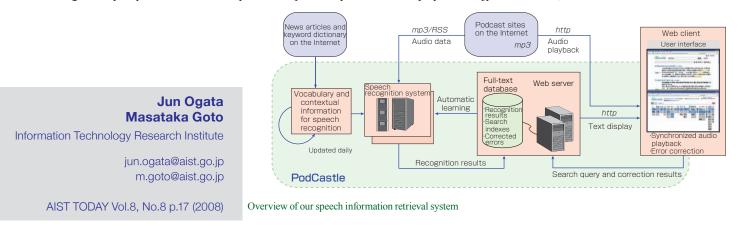
## **PodCastle: A speech information retrieval system in which its performance can be improved by users' contribution** Launching an on-line speech recognition system that can handle recent words and grow on a daily basis

We have developed an Internet service, "PodCastle", that provides full-text searching of speech data (podcasts) on the basis of automatic speech recognition technologies. PodCastle enables a number of anonymous users to search and read podcasts, and to share the full text of speech recognition results for podcasts. However, even state-of-the-art speech recognizers cannot correctly transcribe all podcasts, because their content and recording environments vary very widely. PodCastle therefore encourages users to cooperate by correcting speech recognizer, it implements a mechanism whereby the speech recognition performance is gradually improved. We started open-to-the-public experiments at http://podcastle.jp on June 12th, 2008.



Information Technology & Electronics

## Development of indoor autonomous positioning system for mobile information devices

## Measuring indoor position and moving trajectory only by radio beacon and mobile information devices

We have developed an indoor autonomous positioning system for mobile information devices. The system can work on mobile information devices such as cellular phones without server communication. Mobile devices receive and analyze signals from radio beacon devices that is installed in indoor space such as a target building. Many of conventional indoor positioning systems for mobile information devices are based on server-side computation, and they cannot work when the server communication is lost. Although some conventional systems can work within a mobile device, the positioning accuracy is limited, i.e., they can only determine the region where a beacon signal is detected. Our system has advantages of 1) measuring position and moving trajectory at the accuracy of meter order based on stochastic and statistical analysis of multiple radio beacon signals, and of 2) being able to work only by radio beacons and mobile information devices such as cellular phones. The system is installed and demonstrated in Yokohama Landmark Plaza which is a real commercial shopping mall.

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Indoor autonomous positioning system

