

## TravellingWave speech processing algorithm said to improve speech recognition

*“Predictive speech-to-text” combines text and voice input*

**TravellingWave** announced that it has addressed multimodal noise interference issues commonly associated with mobile speech input through the development of a new speech processing algorithm. TravellingWave’s Rao-Aronov-Garafutdinov speech-processing (RAGs) algorithm enables the VoicePredict product to operate in a multitude of noisy environments. RAGs is a speech processing approach that extracts frequency-localized time-varying modulation features, which reduce background/channel noises; mitigate noisy interferences (as in low frequency hums); and suppress impulse noises (for instance, clicks that are picked by a mobile microphone when users tap the keys). The company claims that the algorithm results in better speech recognition accuracy on mobile devices.

TravellingWave is currently in trials with several mobile phone manufacturers and mobile carriers for VoicePredict, which integrates the noise suppression software with a speech recognition solution (SSN, September 2007, p. 24). The company plans to release the product independently as a downloadable software package for end-users with selected handsets in the second half of the year.

Using VoicePredict (software that resides on mobile devices), a user simply speaks a word, types a letter or two, and the word appears on the mobile screen. The text input aids the speech recognition and vice versa.