

# PREDICTIVE TECHNIQUES IN SPEECH PROCESSING

Marina CIDOTĂ  
University of Bucharest  
e-mail: marina\_cidota@yahoo.com

## **Abstract**

Speech signals have statistically non stationary properties and cannot be processed properly by the use of classical linear parametric models (AR, MA, ARMA). The neural network approach to time series prediction is suitable for learning and recognizing the nonlinear nature of the speech signal. We present three types of learning algorithms for recurrent neural networks for prediction [1] and test them on two classes of speech signals, spoken by both men and women in different dialects of English language.

**Key Words:** prediction, recurrent neural networks  
**AMS Classification:** GUG35, C2M45.