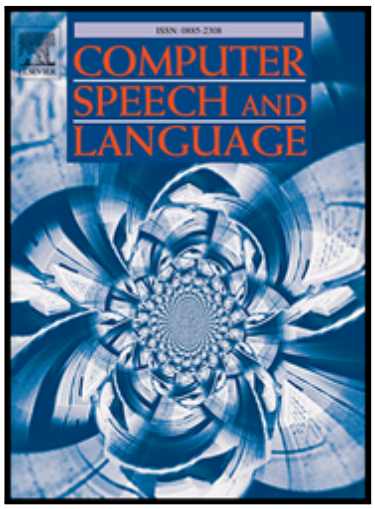

Predicting Speech Intelligibility with Deep Neural Networks

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Highlights

- An automatic speech recognizer using deep neural networks is proposed as model to predict speech intelligibility (SI).
- The DNN-based model predicts SI in normal-hearing listeners more accurately than four established SI models.
- In contrast to baseline models, the proposed model predicts intelligibility from the noisy speech signal and does not require separated noise and speech input.
- A relevance propagation algorithm shows that DNNs can listen in the dips in modulated maskers.