We present our live speech Arabic dialect identification system; QCRI-MIT Advanced Dialect Identification System (QMDIS). Our demo features modern web technologies to capture live audio, and broadcasts Arabic transcriptions along with the corresponding dialect simultaneously. The detected dialect is visualized using light map, where the intensity of the color reflects the probability of the dialect. We also integrate meter bars to display live the probability for each dialect per sentence.

Our demo is publicly available at https://dialectid.qcri.org

Dataset: Multi-Genre Broadcast 3 (MGB-3)

Acoustic model features; (1) Mel-Freq. Cepstral Coefficients (MFCC), (2) log Mel-scale Filter Bank energies (FBANK), (3) spectrogram energies

Data augmentation through speed perturbation

Siamese neural network models to learn similarity and dissimilarities among Arabic dialects, as well as i-vector post-processing to adapt domain mismatches

References
