Noise robust pitch stylization using minimum mean absolute error criterion

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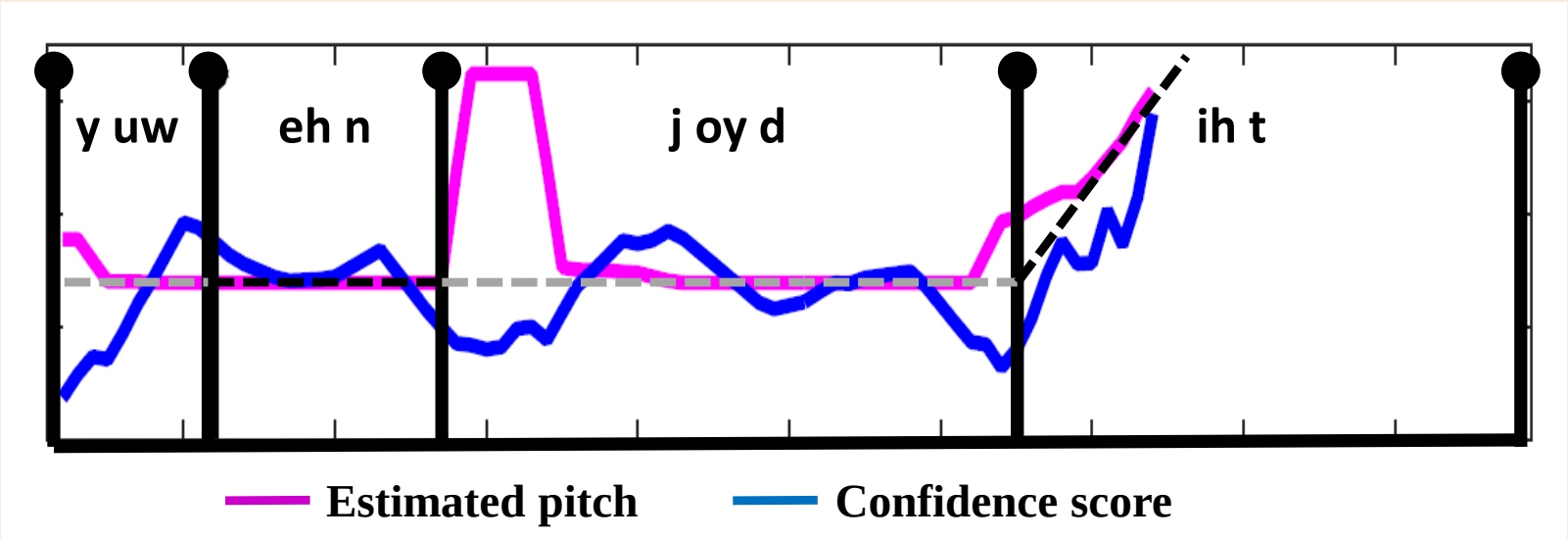
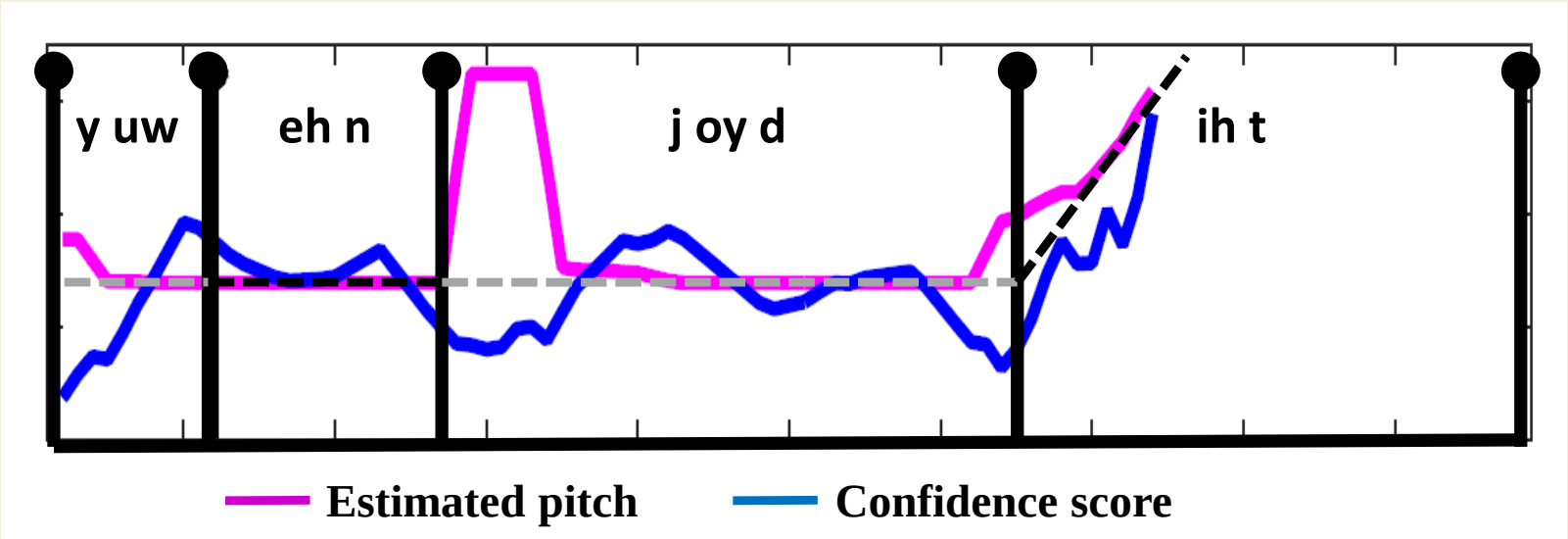
Objective



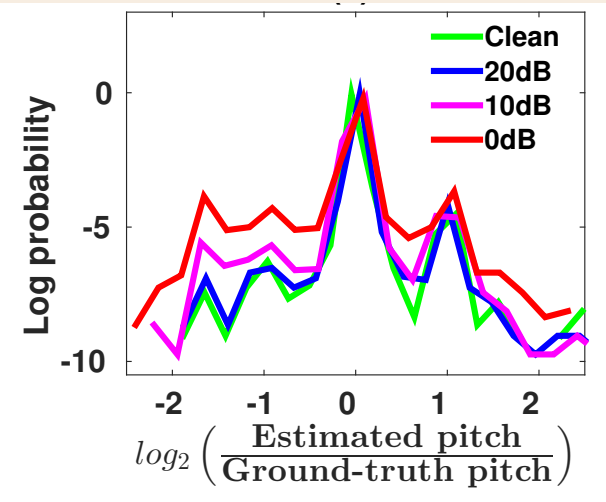
Objective



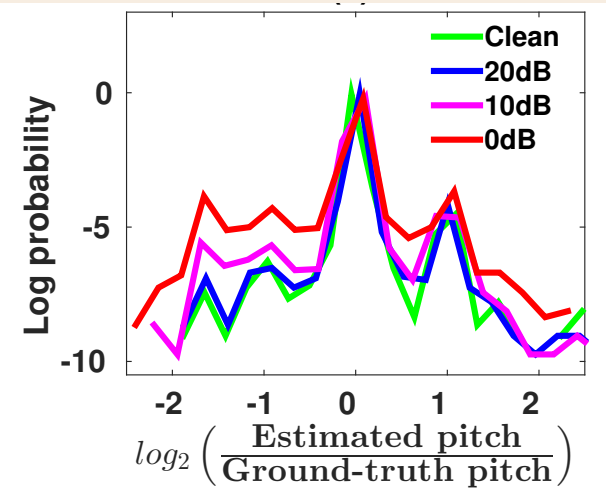
Goal

Obtain robust pitch stylization in the presence of pitch halving and doubling errors.

The main idea

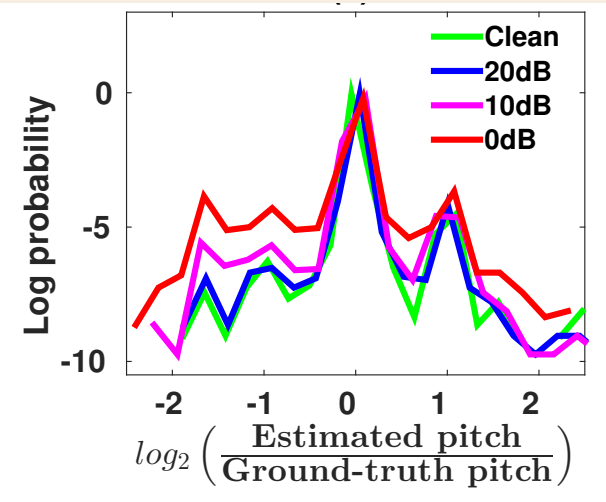


The main idea



$$\underset{\{\lambda_1\},\{\lambda_2\},\{\alpha_p\}}{\operatorname{argmin}} \sum_{k=1}^{K} \sum_{n=\lambda_1(k)}^{\lambda_2(k)} \left| x_n - \sum_{p=0}^{P} \alpha_p(k) n^p \right|$$

The main idea



$$\underset{\{\lambda_1\},\{\lambda_2\},\{\alpha_p\}}{\operatorname{argmin}} \sum_{k=1}^{K} \sum_{n=\lambda_1(k)}^{\lambda_2(k)} \left| x_n - \sum_{p=0}^{P} \alpha_p(k) n^p \right|$$