Binaural Scene Classification with Time-frequency Scattering and Deep Convolutional Networks

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Abstract—The abstract goes here.

I. Introduction

II. Time-frequency scattering

$$\boldsymbol{y_2}[t, k_1, k_2] = (\boldsymbol{x_1} \overset{t,k_1}{*} \boldsymbol{\psi_{k_2}})\,[t, k_1] \tag{1}$$

$$\mathbf{W_2}[t, k_1, k_2] = \alpha\psi(\alpha t) \times |\beta|\psi(\beta k_1) \tag{2}$$

III. Deep Convolutional Networks

[?]

$$\boldsymbol{x}[t] = r \times \boldsymbol{x}^{\mathsf{L}}[t] + (1 - r) \times \boldsymbol{x}^{\mathsf{R}}[t], \tag{3}$$

where r is drawn uniformly at random in the interval $[0, 1]$.

IV. Conclusion

The conclusion goes here.