

Christian Steinmetz

Joshua D. Reiss and Shanxin Yuan

Designing and Controlling Audio Effects with Machine Learning

Automatic differentiation has been shown empirically to perform best in order to train neural network models to learn to control audio effects, however this is a white-box approach that limits its applicability in real-world scenarios.

How can we not only learn to control non-differentiable signal processors but also learn to dynamically construct an audio processing graph of these processors for specific tasks.