

Speech Enhancement Topics

Overview

1. A real-time low-resource SE model (<50M Flops, <2MB) for 44.1kHz speech.
 - For Lark meetings usage.
 - Main efforts is on bad cases repairments.
2. A speech enhancement model build with weakly labeled data from AudioSet.
 - Only contribute to the experiment parts. But the idea is worth sharing.

Speech Enhancement

Low resource and real-time

- Task: Build a real-time low-resource SE model (<50M Flops, <2MB) for 44.1kHz speech.
- Main efforts:
 - Data augmentations according to bad cases.
 - High reverberation, low frequency losses, bubble and keyboard noise, etc.
 - Input feature selections
 - MFCC, Energy feature, Delta feature and Mel spec.
 - Final model architectures.
 - Two layers of GRUs and linear layers.