Speech Enhancement with Deep Learning
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How can we use Deep Learning to remove noise from speech recordings to improve their quality and intelligibility?

Training

Feature extraction
Current:
- Take log of magnitude
- Ignore phase

How to improve?
- Gammatone filtering?
- Include phase?
- Speech codec?
- Multichannel input?

DNN Fitting
Current:
- Multilayer perceptron
- MSE loss function

How to improve?
- Different network type!
- Stay in time domain!
- Better loss function!

Enhancement

More info & sound examples AcousticsResearchCentre.no