

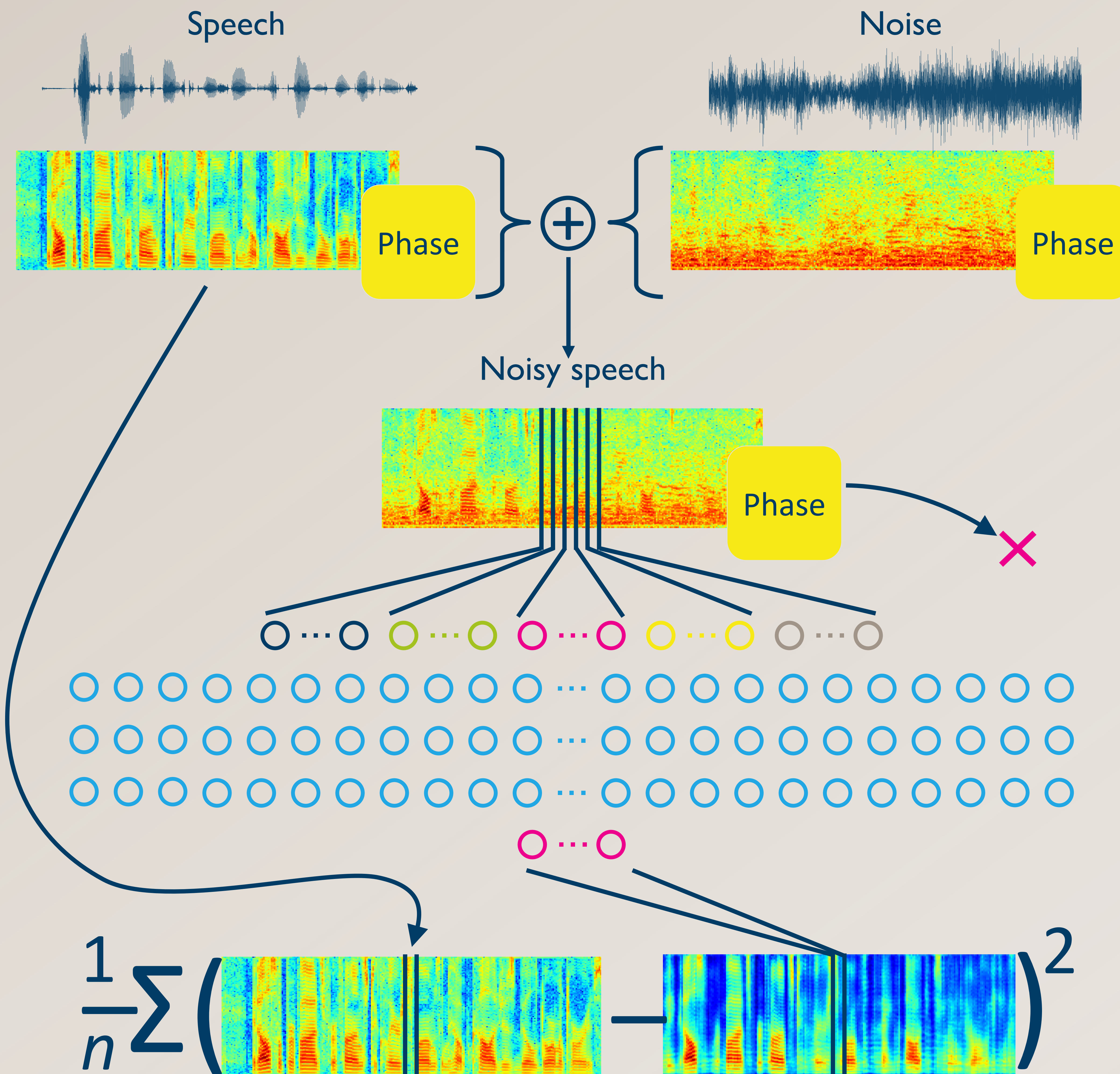
Speech Enhancement with Deep Learning

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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

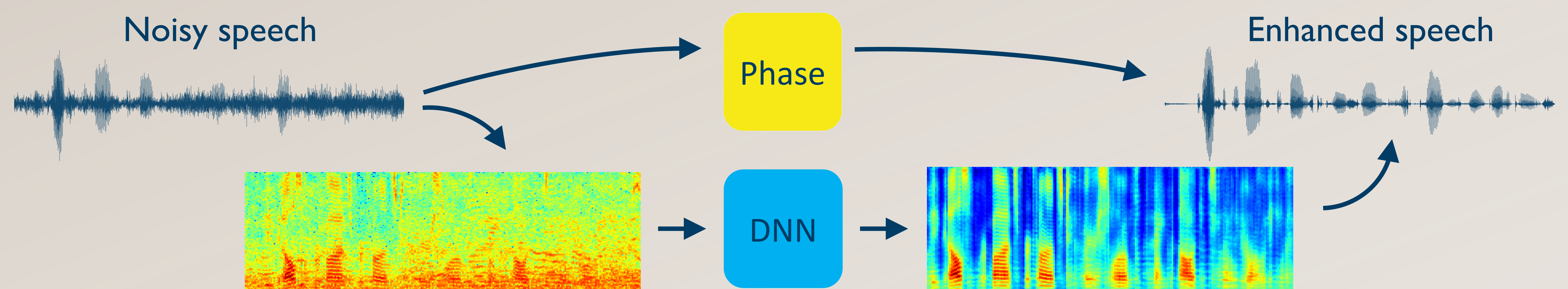
Current:

- Multilayer perceptron
- MSE loss function

How to improve?

- Different network type?
- Stay in time domain?
- Better loss function?

Enhancement



More info & sound examples



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