Notes on references

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1 DDSP

[1] used as main reference for the research.

1.1 Important bullet points

- Interpretable and modular approach to generative modeling

- Classic signal processing elements with deep learning methods

- Models that rely on strided convolution or windowing (STFT) need to align wave-shapes or suffer from spectral leakage.

1.2 How it relates to my research

1.3 Newly learned concepts from this document

- Strided Convolution:

  Convolution that has a hop length, meaning, it skips some information to avoid analyzing redundancies.

- Teacher forcing:

  Feeding back the correct answers into training algorithms to reduce training times and lead the model in the right direction during training.

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References

[1] J. Engel, L. H. Hantrakul, C. Gu, and A. Roberts, "Ddsp: Differentiable digital signal processing," in *International Conference on Learning Representations*, 2020.