

Neural Audio

Music Information Retrieval using Deep Neural Networks

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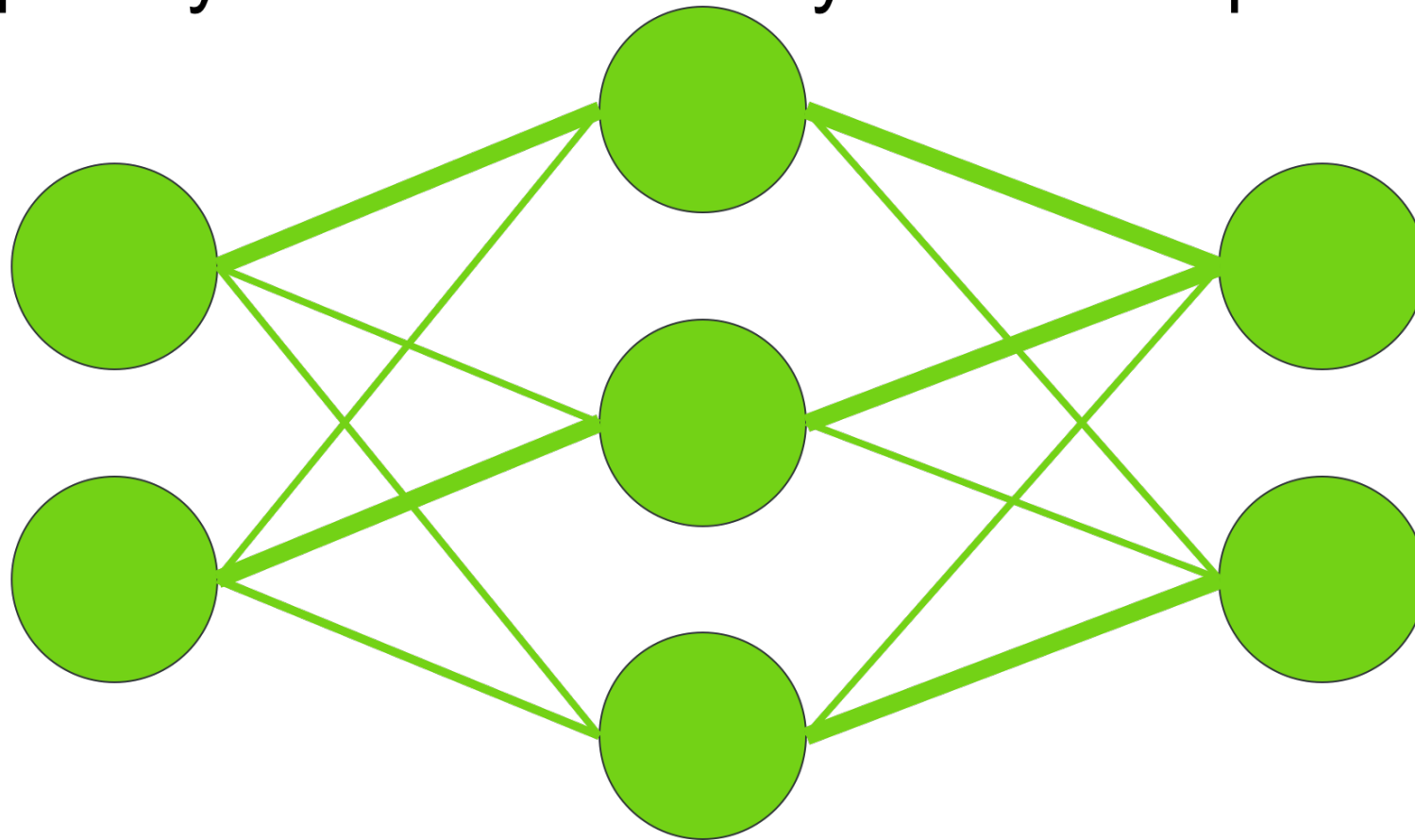
Summary

Neural Networks

input layer

hidden layer

output layer



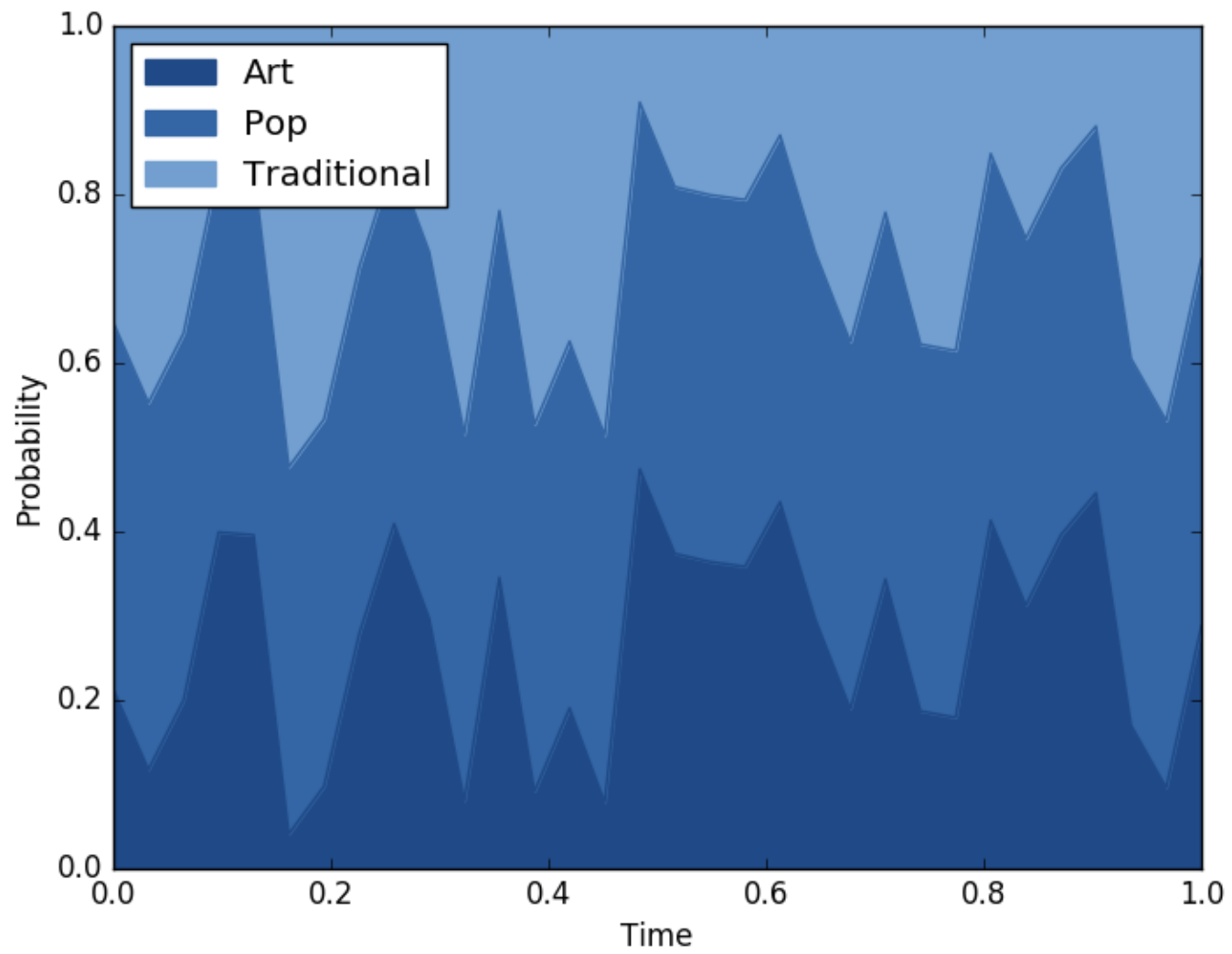
Music Information Retrieval

Does what it says on the tin: pulls information out of music

Pandora + Spotify – not actually MIR techniques

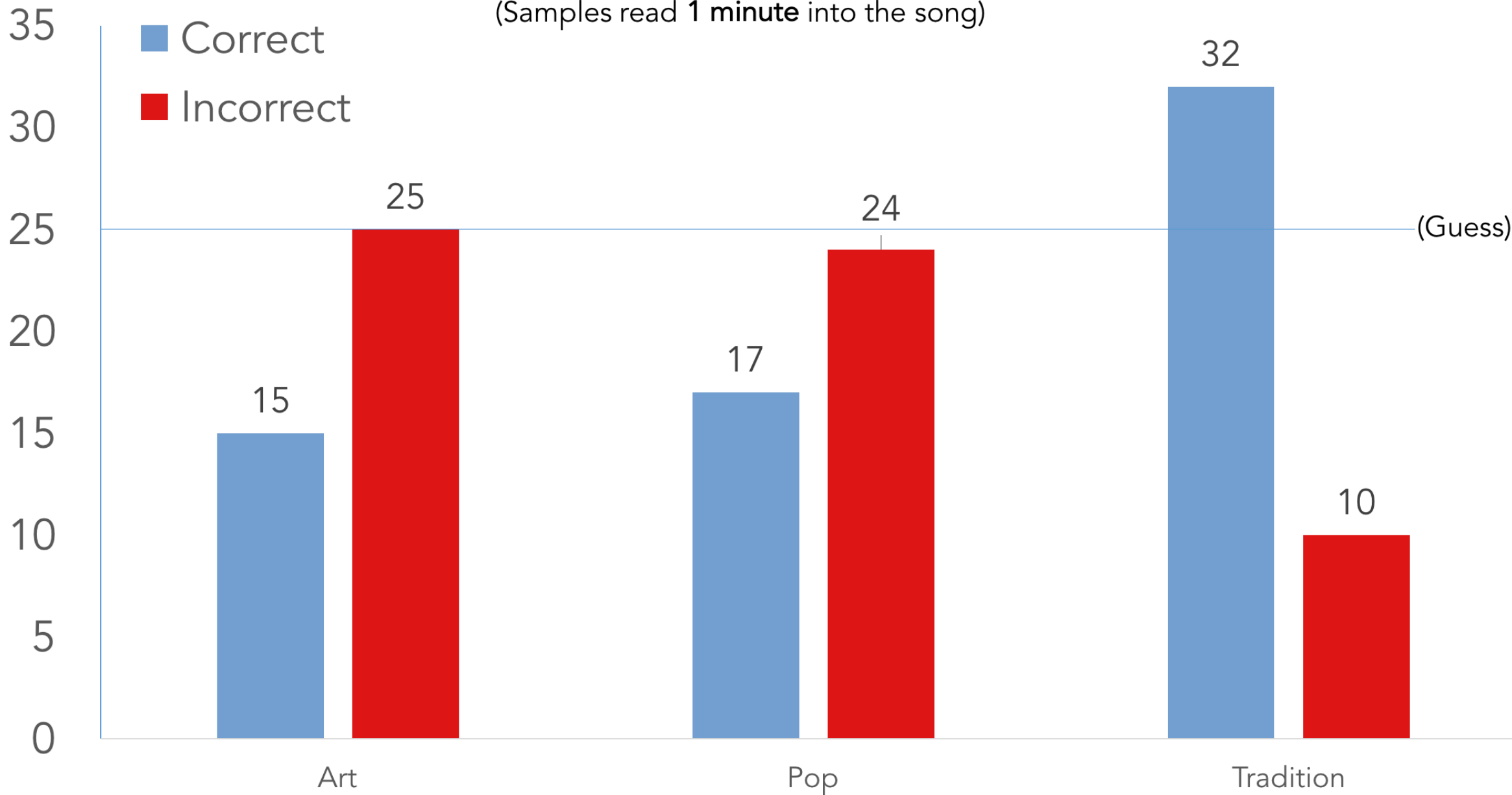
GraceNote – song information for CDs

Genre Identification

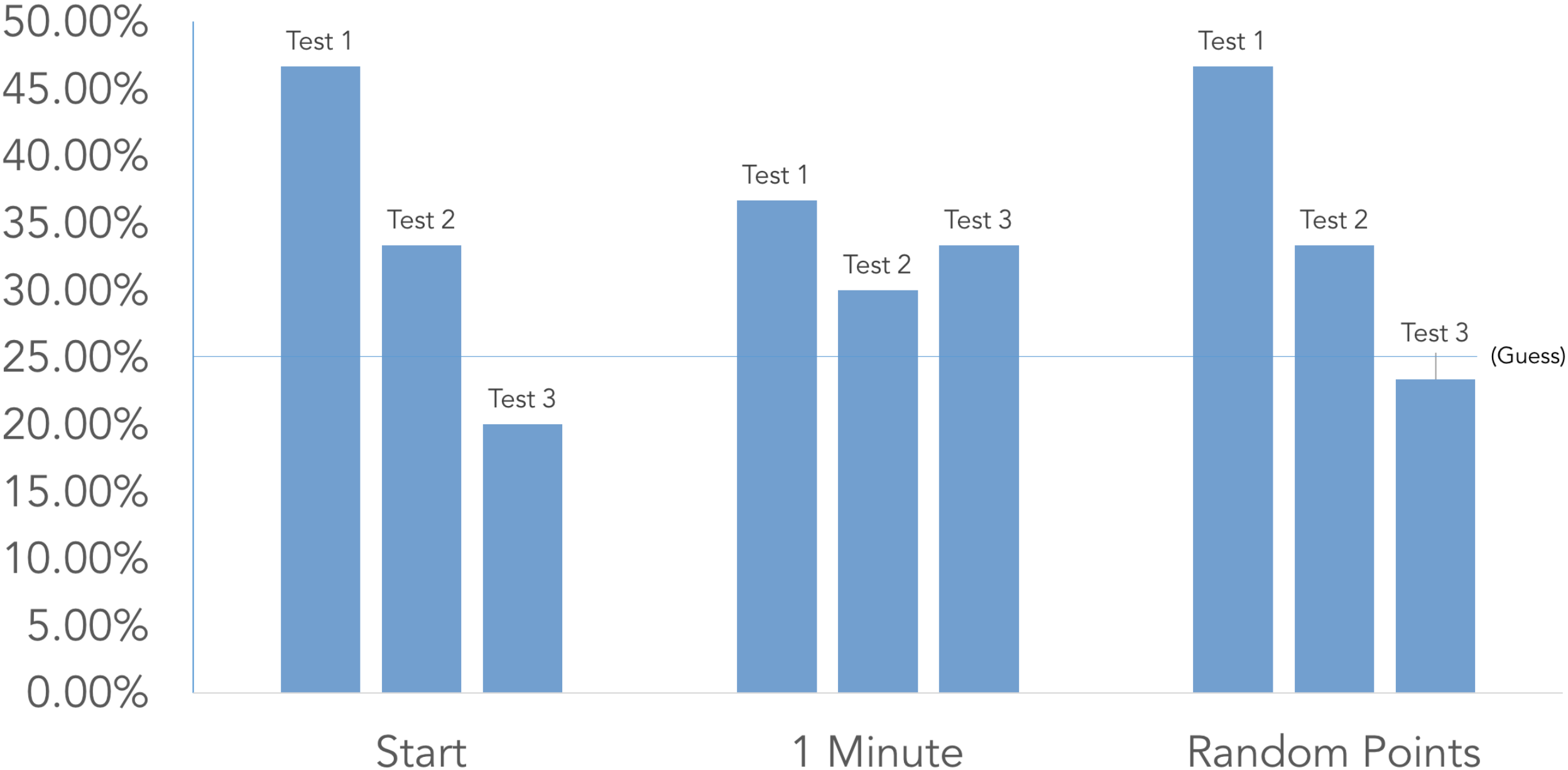


Accuracy of Genre Identification

(Samples read 1 minute into the song)



Accuracy of Tests at Varying Sample Locations

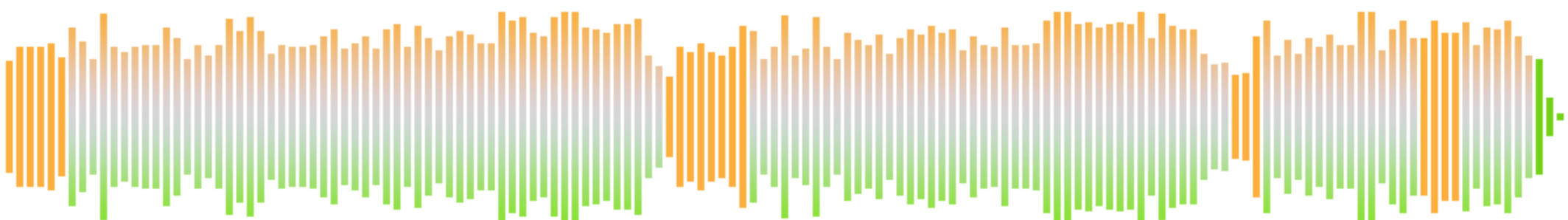


Instrument Identification

Neural Network



Manual Labelling



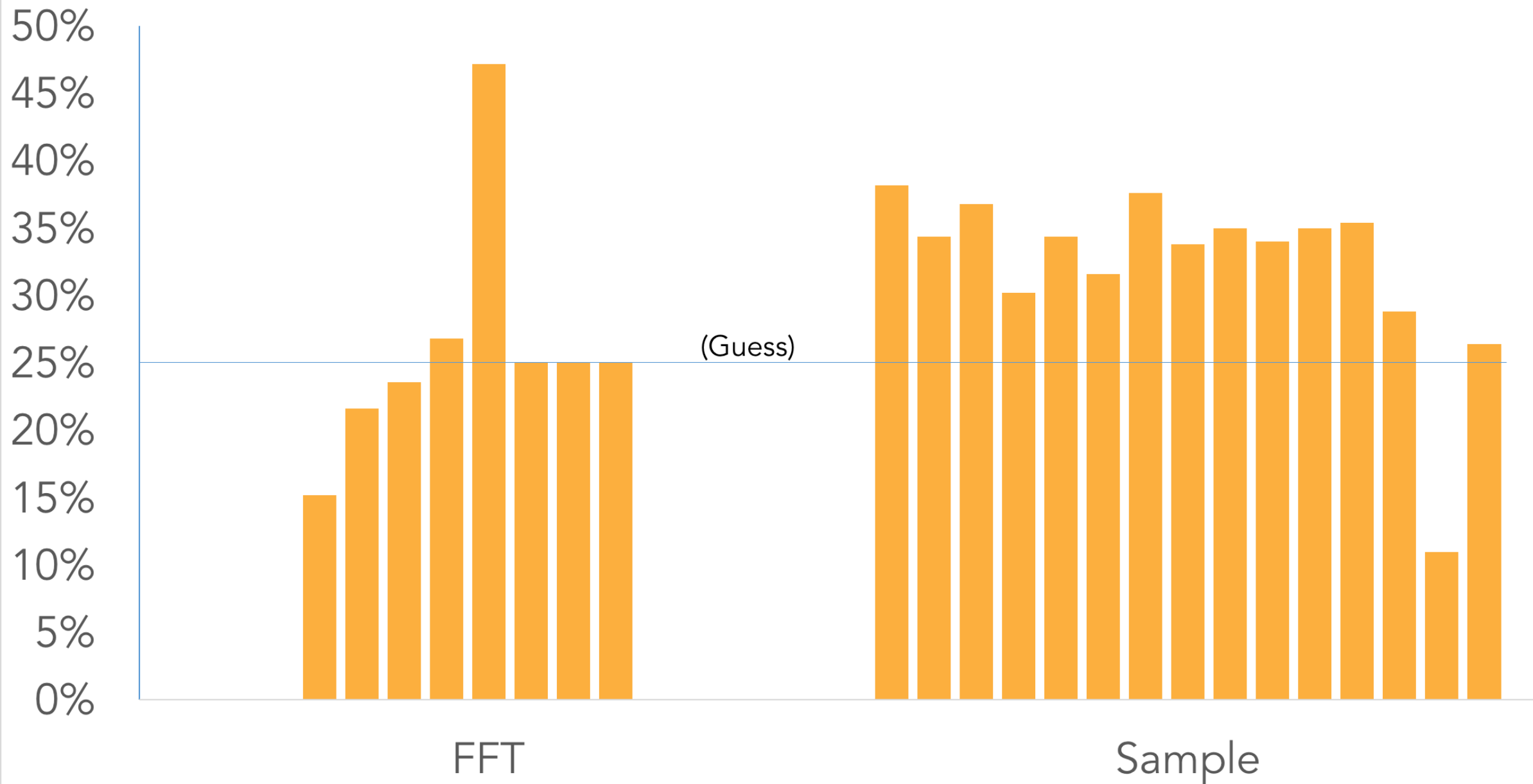
Guitar

Voice

Drum

Other

Accuracy of FFT vs. Sample Input



Thank you. Any questions?

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grey280.github.io/nAud