

DeepGram - Google for Audio



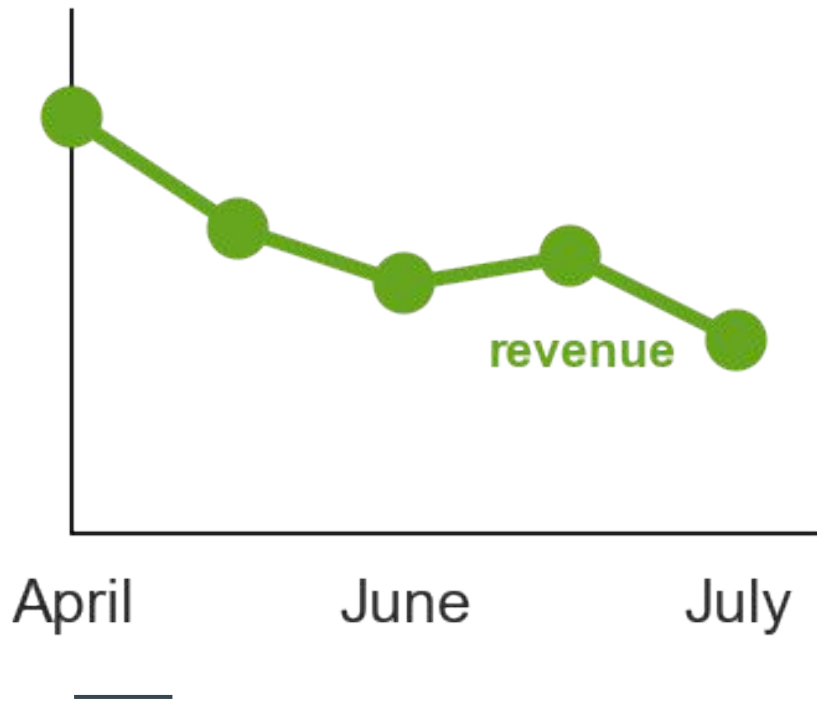
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Matar Haller

CEO Scott Stephenson; CTO Noah Shetty

The problem:

Neglected (but valuable)
audio data

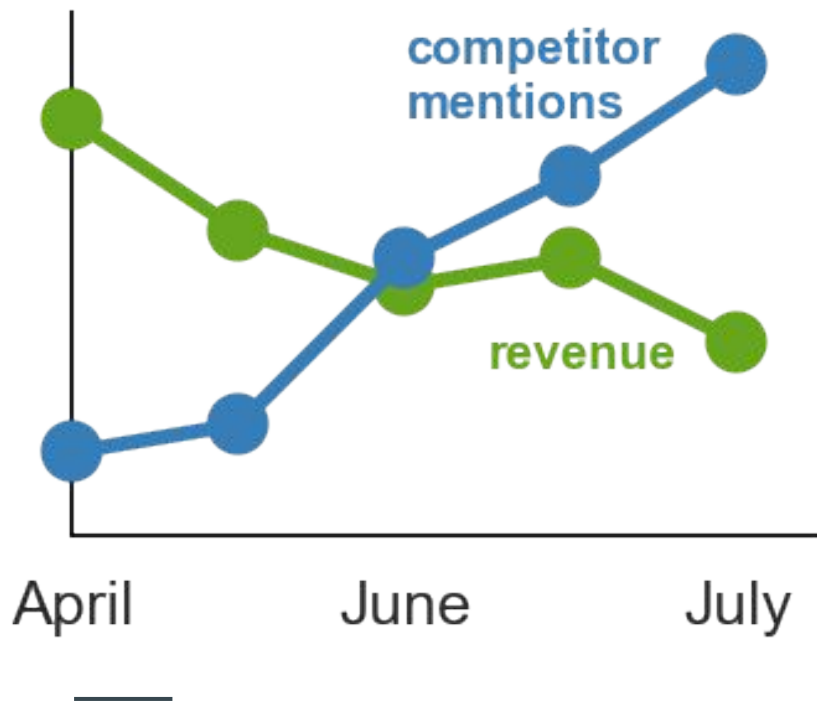


The problem:

Neglected (but valuable)
audio data

The solution:

DeepGram:
Index audio and make it
searchable for business



BUT: what if there are multiple speakers?



The deliverable:

Production ready code.

Input:

Recorded conversation



The deliverable:

Production ready code.

Input:

Recorded conversation



Output:

Who is speaking when?



Pipeline



Pipeline



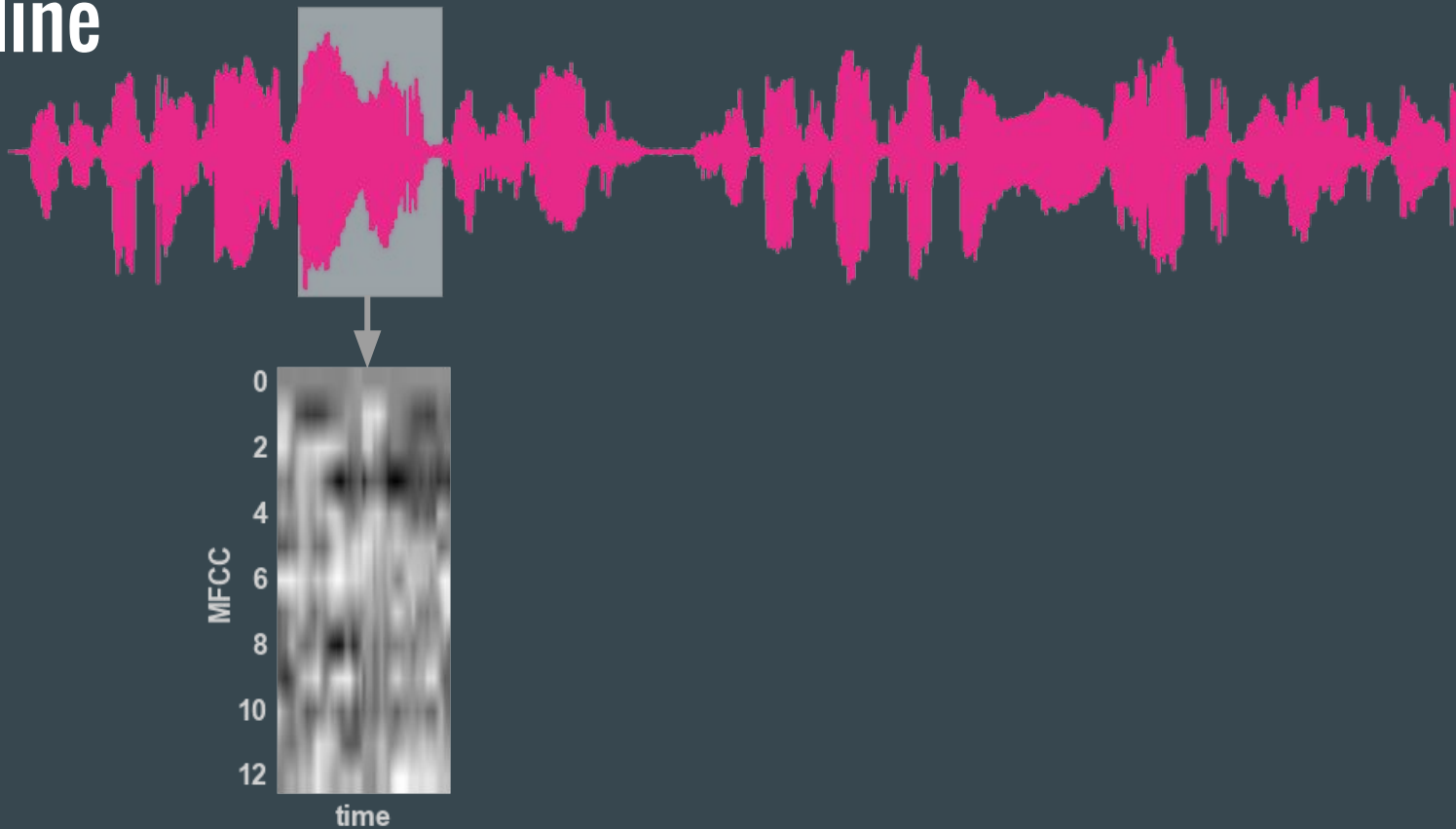
features on sliding windows

Pipeline



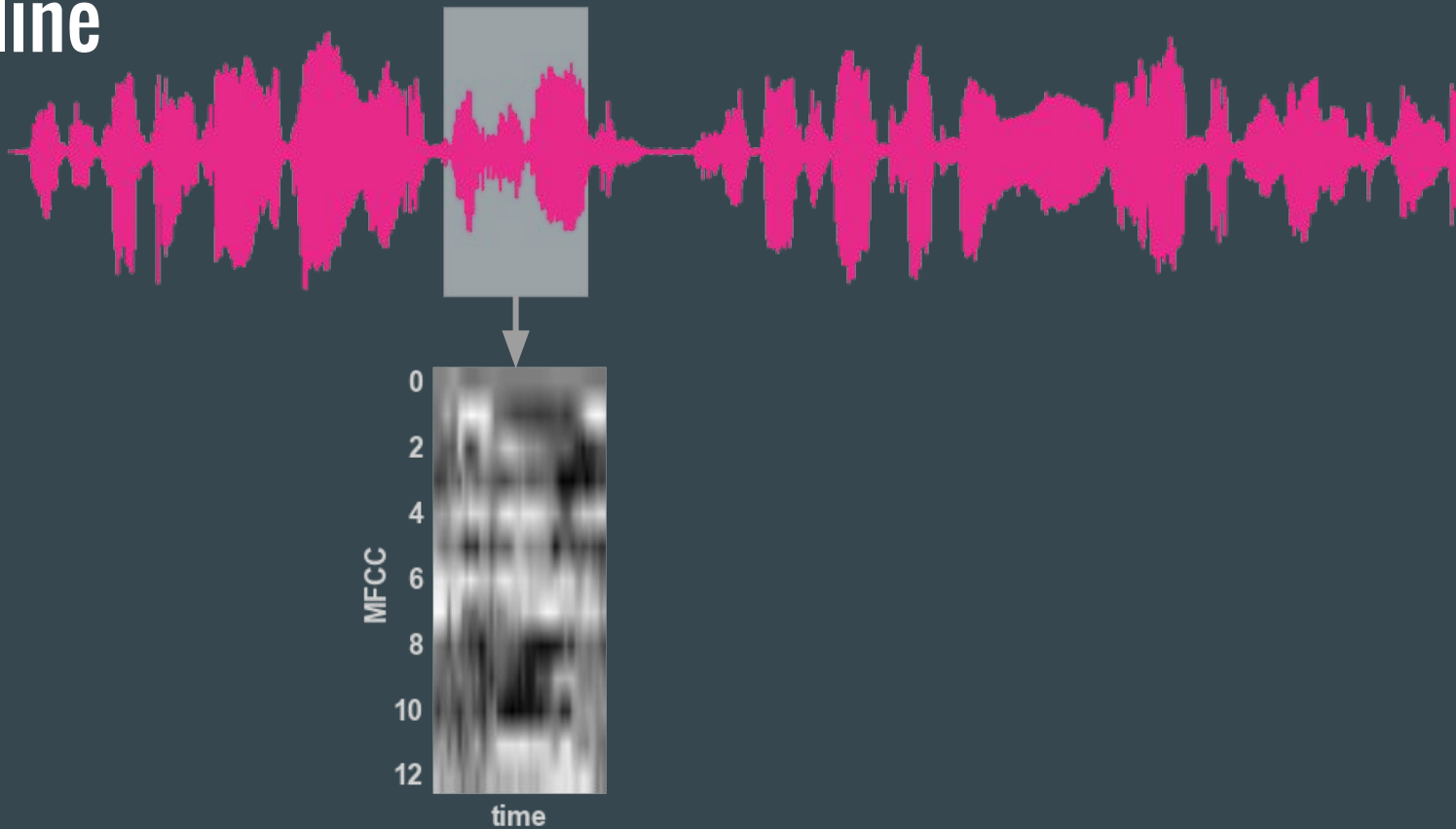
features on sliding windows

Pipeline



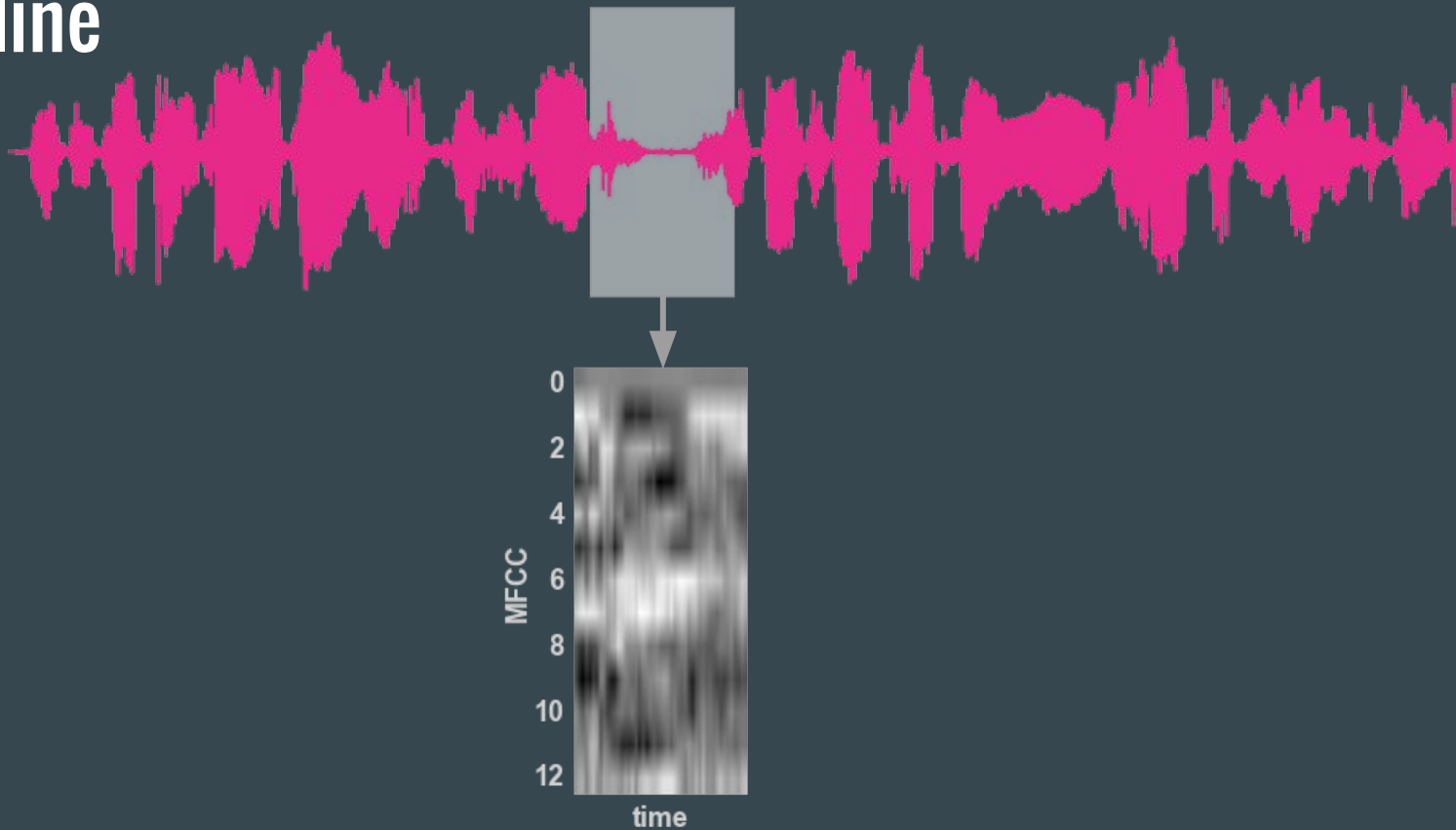
features on sliding windows

Pipeline



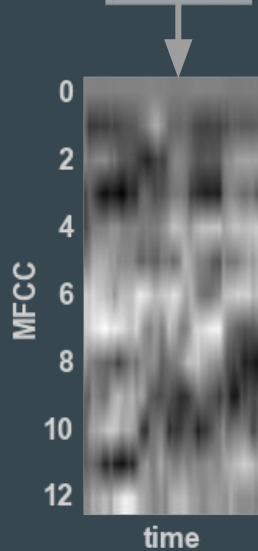
features on sliding windows

Pipeline



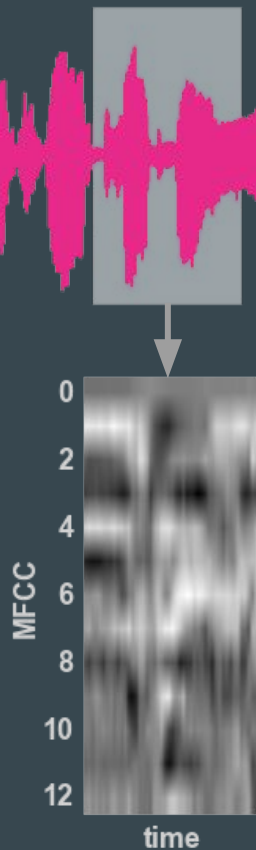
features on sliding windows

Pipeline



features on sliding windows

Pipeline



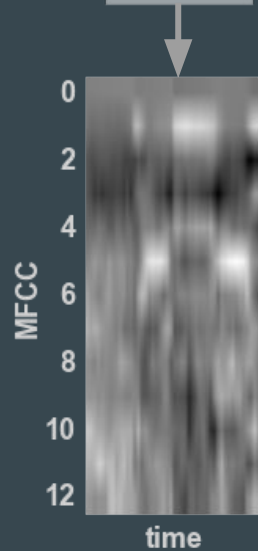
features on sliding windows

Pipeline



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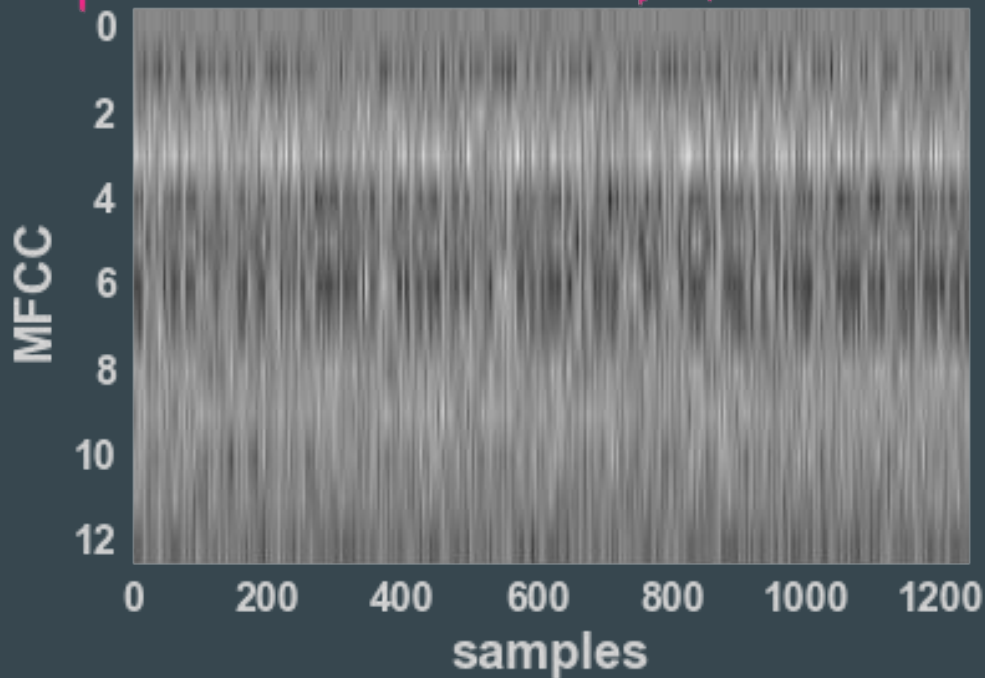
features on sliding windows

Pipeline



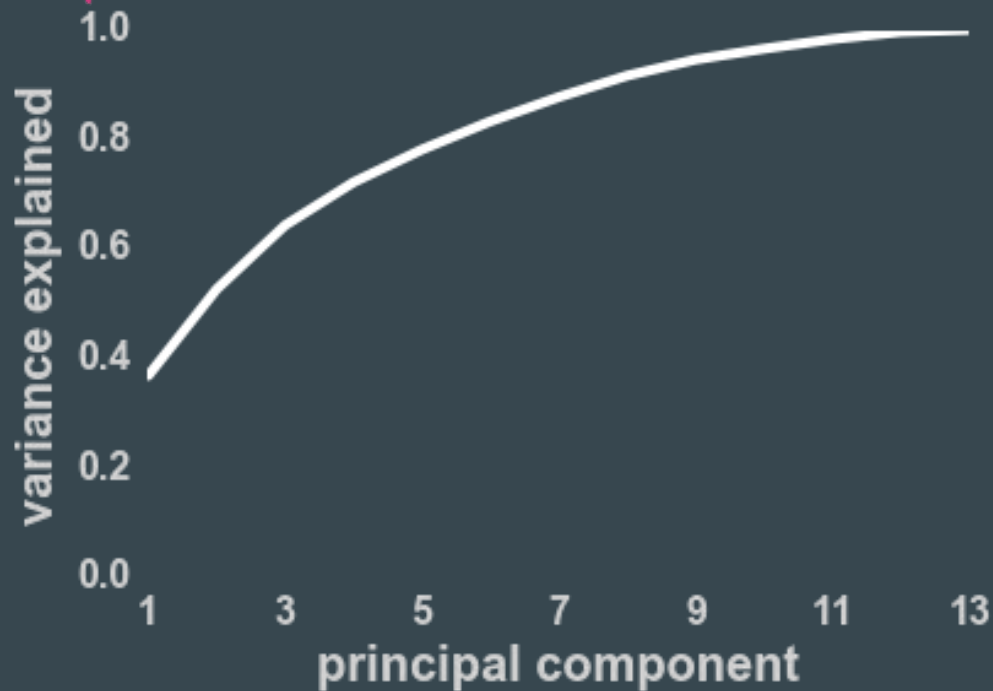
features on sliding windows

Pipeline



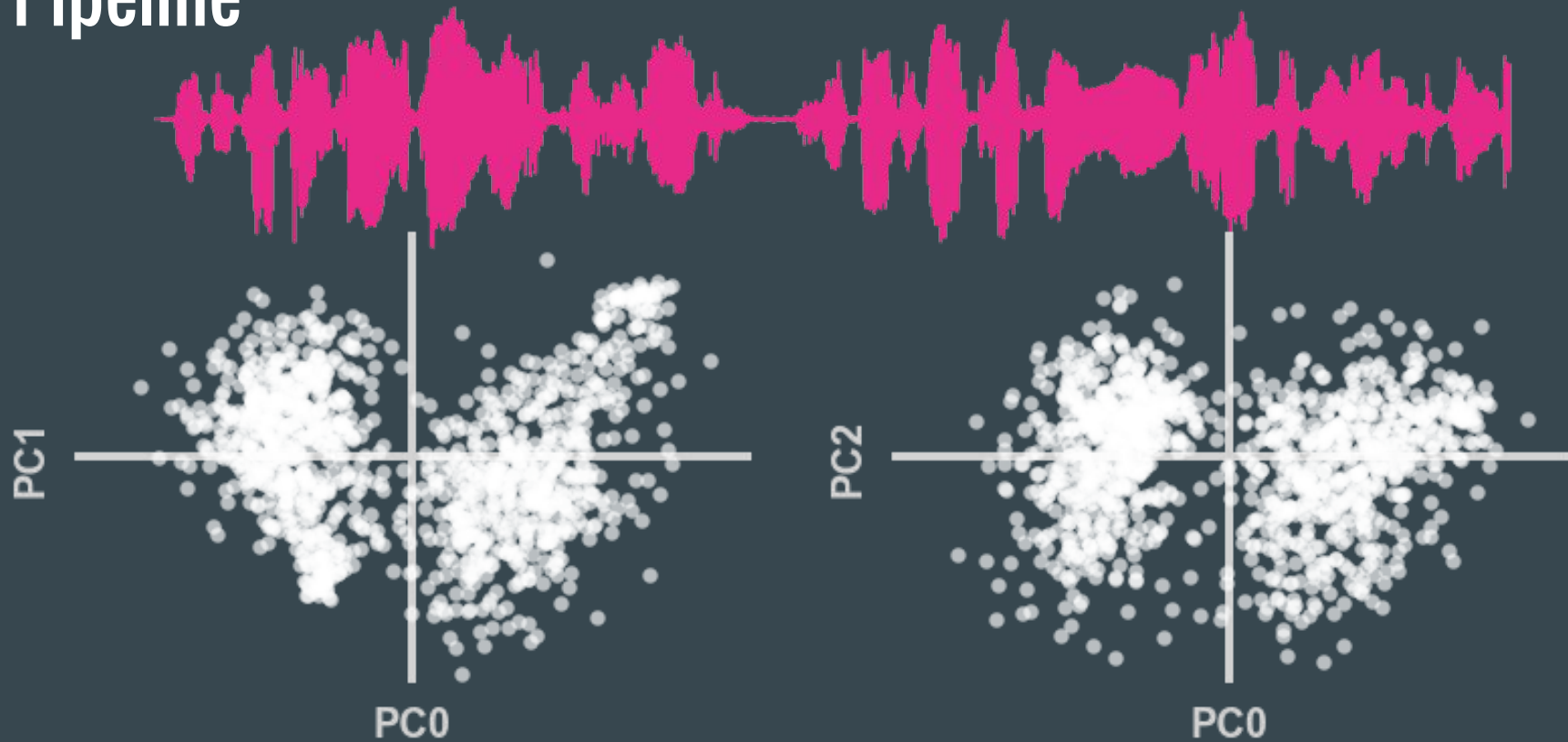
features

Pipeline



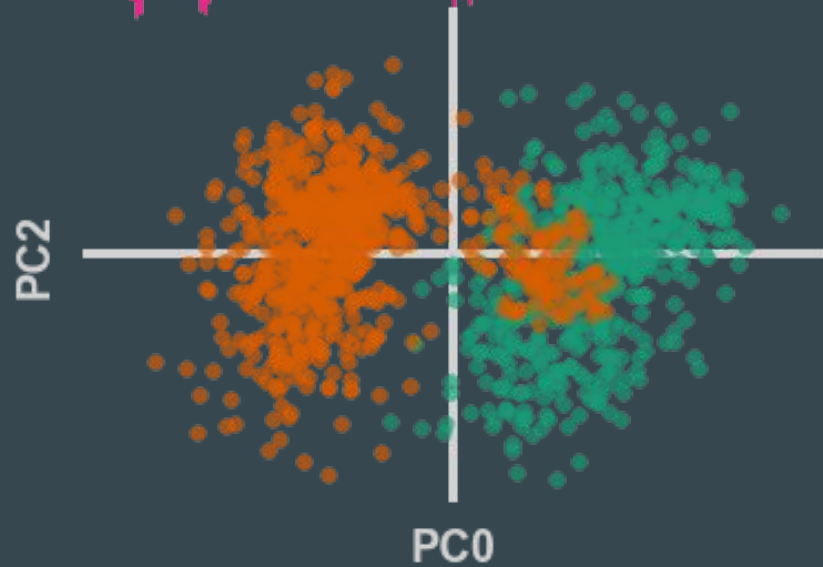
keep 3 PCs

Pipeline



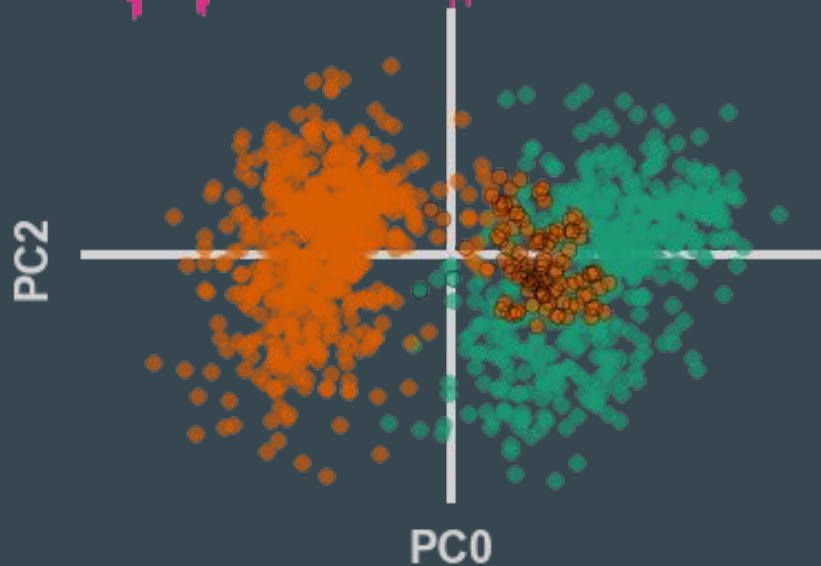
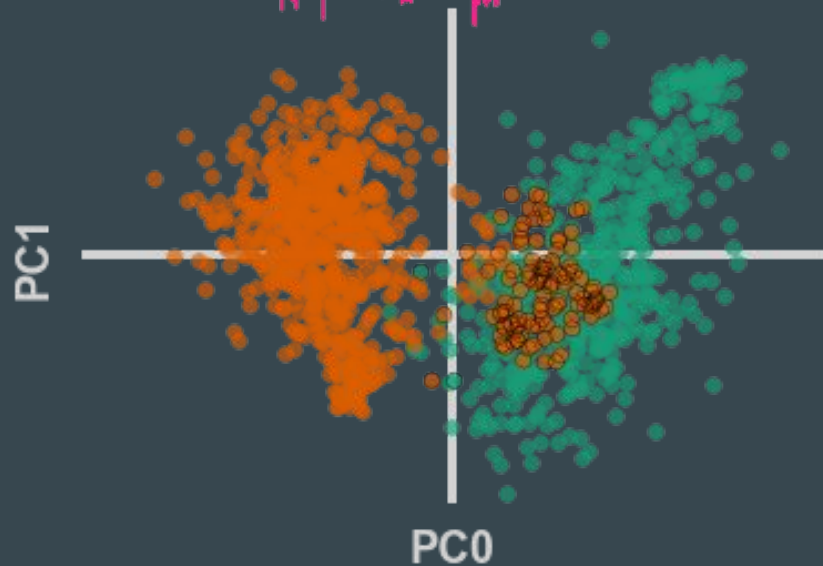
project data

Pipeline



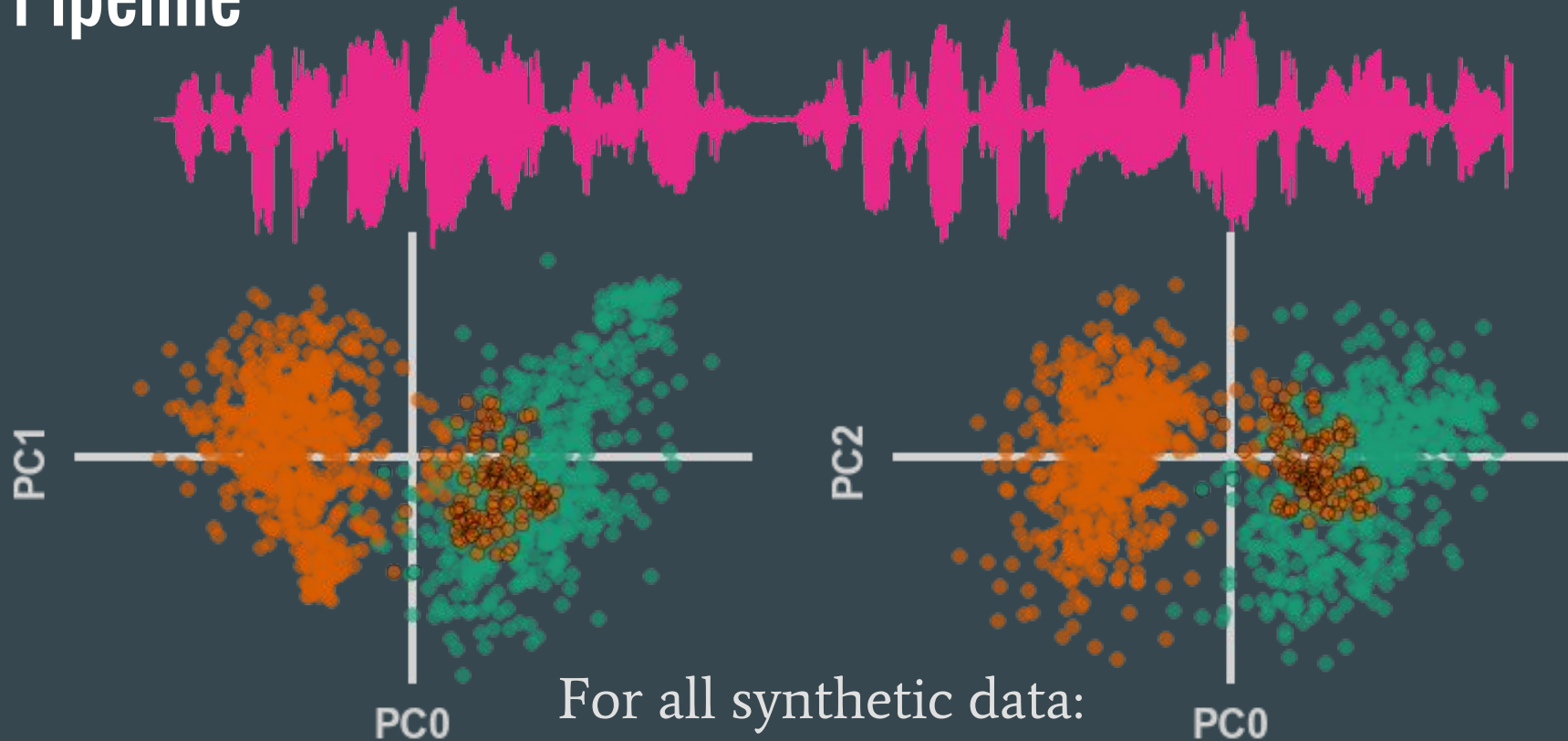
cluster

Pipeline



validate

Pipeline



precision = 0.71
recall = 0.80

performance

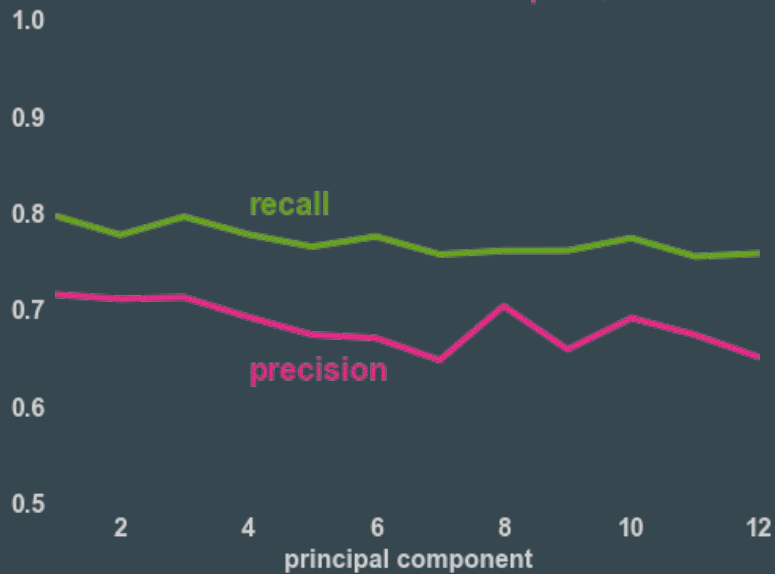
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Berkeley
UNIVERSITY OF CALIFORNIA



Pipeline



classifier performance