

PyTorch for Audio + Music Processing

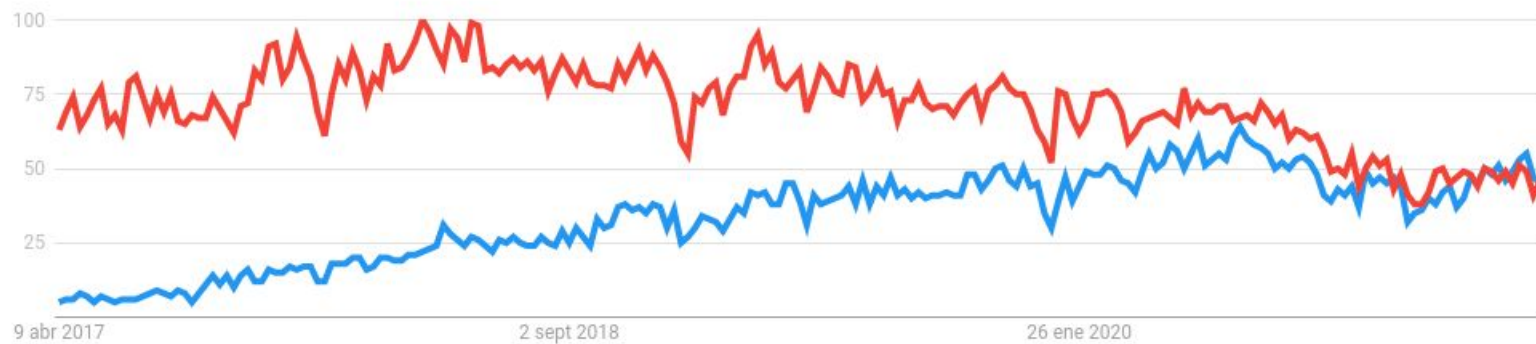
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Technologies



What's *torchaudio*?

- Audio processing library for PyTorch
- I/O functionalities
- Audio datasets
- Data augmentation
- Feature extraction



■ TensorFlow

■ PyTorch

Technologies

- PyTorch usage is growing
 - Already dominating in academia
 - Picking up also in the industry
- Open source
- Running audio feature extraction on GPU is efficient

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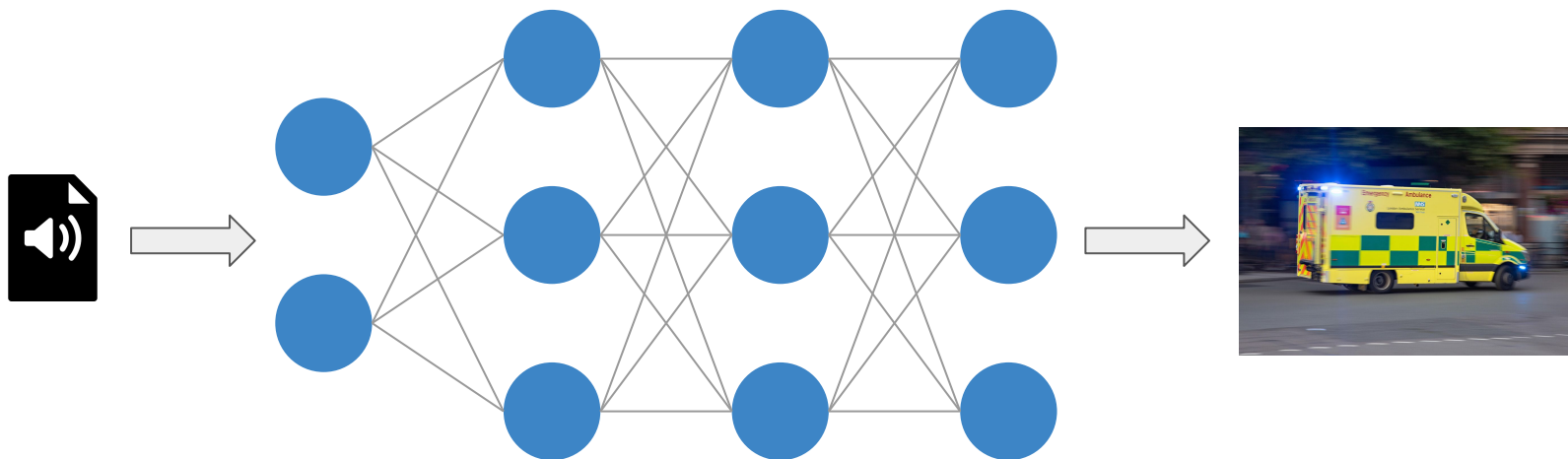
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- Use CNN models for sound classification

What should you expect?

- Mainly coding
- Little to no theory
- 1 sample project

Urban sound classification



Urban sound classification

- Multiclass classification problem
- *UrbanSound8k* dataset
- 10 sound classes

Prerequisites

- Intermediate Python
- Advisable:
 - Basic understanding of audio features (Mel spectrograms)
 - Familiar with Deep Learning (CNN architectures)

Where do I get code/slides?



Who's this series for?

- ML/DL engineers
- Computer science students
- Software engineers
- Music technologists

Join the community!



thesoundofai.slack.com

What next?

- Build your first DL model in PyTorch