Introduction to Mozilla Voice Tools

Josh Meyer | Mozilla Fellow

@_josh_meyer_

Roadmap

- DeepSpeech
  - Usage
  - Training

- Common Voice
  - Download
  - Contributing

- TTS
  - Usage
  - Training

DeepSpeech

- DeepSpeech
  - Usage
  - Training

DeepSpeech

- DeepSpeech
  - Usage
  - Training

deepspeech.readthedocs.io

DeepSpeech

- Usage

  CLI client

  C API

  Python package

  NodeJS package

  .NET client

DeepSpeech

- Usage

  CLI client

  ```
  deepspeech \
      --model deepspeech-0.7.4-models.pbmm \
      --scorer deepspeech-0.7.4-models.scorer \
      --audio audio_input.wav
  ```

DeepSpeech

- Training

DeepSpeech

- Training

Python scripts w/ Tensorflow

```
python3 DeepSpeech.py \
    --train_files train.csv \
    --dev_files dev.csv \
    --test_files test.csv
```

DeepSpeech

- Training

    Requirements
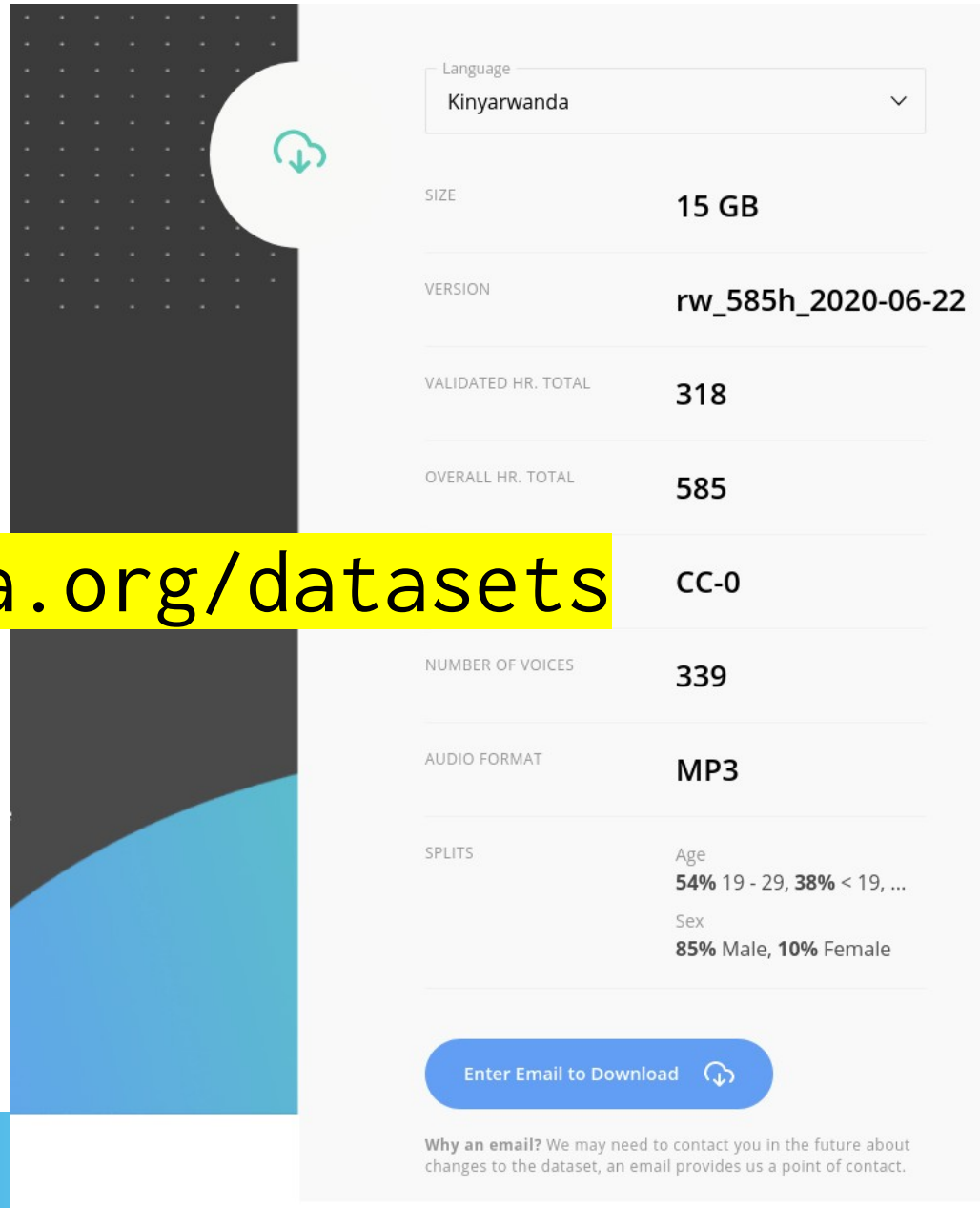   - GPUs
    - Transcribed Audio (5-15 seconds longs)

Common Voice

- Common Voice
  - Download
  - Contributing

Common Voice

- Download

voice.mozilla.org/datasets

Language
Kinyarwanda

SIZE
15 GB

VERSION
rw_585h_2020-06-22

VALIDATED HR. TOTAL
318

OVERALL HR. TOTAL
585

CC-0

NUMBER OF VOICES
339

AUDIO FORMAT
MP3

SPLITS
Age
54% 19 - 29, **38%** < 19, ...
Sex
85% Male, **10%** Female

Enter Email to Download

Why an email? We may need to contact you in the future about changes to the dataset, an email provides us a point of contact.

Common Voice

- ## Contribution

👥 📕 Mozilla Voice Community Playbook V1.1

- *Last update: July 23th 2020*
- *Edit this document and propose a change*
- *Content coordination: Rubén Martín rmartin@mozilla.com*
- *License*

Mozilla Voice communities empower the collection of machine-learning based voice technologies -- including software, tools, and data -- that Mozilla stands behind.
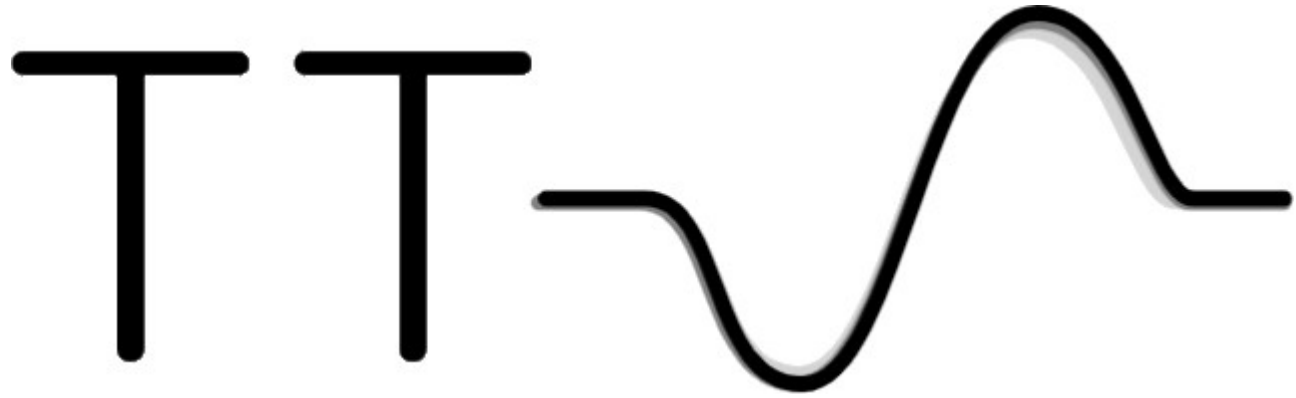
Goals for this playbook

- Provide people interested in contributing to Mozilla Voice goals and mission with clear guidelines and expectations on how to set up and run a self-sustaining Mozilla Voice community.
- Unify existing community knowledge previously documented in different places.
- Be the central place to understand the whole voice community journey.
- Communicate what brings value to the project and how communities can support it.
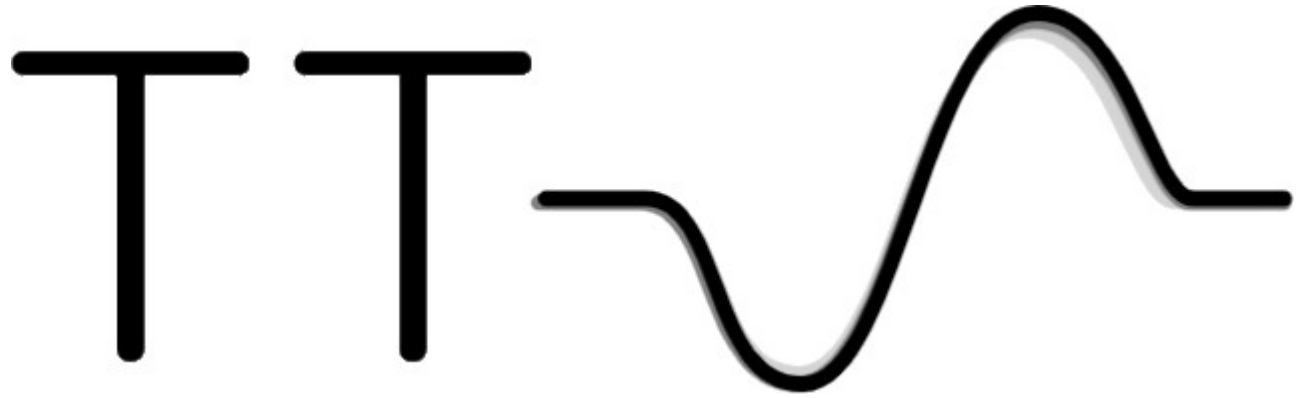
`github.com/Common-Voice/community-playbook`

- TTS
  - Using
  - Training
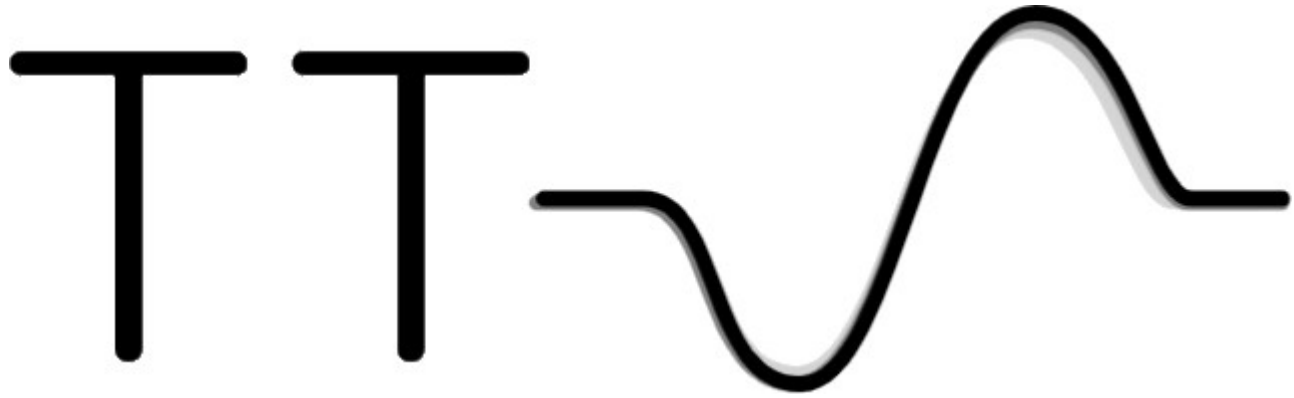
- Usage

  - Python + Torch or TensorFlow

- Training

  - 10+ hours of voice acting
  - more GPUs

Introduction to Mozilla Voice Tools

Josh Meyer | Mozilla Fellow

@_josh_meyer_