

Package ‘ari’

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Type Package

Title Automated R Instructor

Version 0.1.0

Description Create videos from 'R Markdown' documents, or images and audio files. These images can come from image files or HTML slides, and the audio files can be provided by the user or computer voice narration can be created using 'Amazon Polly'. The purpose of this package is to allow users to create accessible, translatable, and reproducible lecture videos. See <https://aws.amazon.com/polly/> for more information.

SystemRequirements ffmpeg (>= 3.2.4)

Depends R (>= 3.1.0)

Imports aws.polly, tuneR, webshot, purrr, rmarkdown, xml2, rvest, tools, progress

Suggests testthat, grDevices, xaringan

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URL <http://github.com/seankross/ari>

Encoding UTF-8

LazyData true

RoxygenNote 6.0.1

NeedsCompilation no

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ari_example	<i>Get the path to an ari example file</i>
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Description

This function allows you to quickly access files that are used in the ari documentation.

Usage

```
ari_example(path = NULL)
```

Arguments

path	The name of the file. If no argument is provided then all of the example files will be listed.
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Examples

```
ari_example("ari_intro.Rmd")
```

ari_narrate	<i>Create a video from slides and a script</i>
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Description

ari_narrate creates a video from a script written in markdown and HTML slides created with [rmarkdown](#) or a similar package. This function uses [Amazon Polly](#) via [ari_spin](#).

Usage

```
ari_narrate(script, slides, output = "output.mp4", voice,
  capture_method = "vectorized", ...)
```

Arguments

script	Either a markdown file where every paragraph will be read over a corresponding slide, or an .Rmd file where each HTML comment will be used for narration.
slides	A path or URL for an HTML slideshow created with rmarkdown , xaringan , or a similar package.
output	The path to the video file which will be created.
voice	The Amazon Polly voice you want to use. See list_voices .
capture_method	Either "vectorized" or "iterative". The vectorized mode is faster though it can cause screens to repeat. If making a video from an ioslides_presentation you should use "iterative".
...	Arguments that will be passed to webshot .

Examples

```
## Not run:

#
ari_narrate(system.file("test", "ari_intro_script.md", package = "ari"),
            system.file("test", "ari_intro.html", package = "ari"),
            voice = "Joey")

## End(Not run)
```

ari_spin

*Create a video from images and text***Description**

Given equal length vectors of paths to images (preferably .jpgs or .pngs) and strings which will be [synthesized](#) by [Amazon Polly](#), this function creates an .mp4 video file where each image is shown with its corresponding narration. This function uses [ari_stitch](#) to create the video.

Usage

```
ari_spin(images, paragraphs, output = "output.mp4", voice)
```

Arguments

images	A vector of paths to images.
paragraphs	A vector strings that will be spoken by Amazon Polly.
output	A path to the video file which will be created.
voice	The Amazon Polly voice you want to use. See list_voices for more information about what voices are available.

Details

This function needs to connect to [Amazon Web Services](#) in order to create the narration. You can find a guide for accessing AWS from R [here](#). For more information about how R connects to Amazon Polly see the [aws.polly](#) documentation [here](#).

Examples

```
## Not run:

slides <- c("intro.jpeg", "equations.jpeg", "questions.jpeg")
sentences <- c("Welome to my very interestig lecture.",
              "Here are some fantastic equations I came up with.",
              "Any questions?")
ari_spin(slides, sentences, voice = "Joey")
```

```
## End(Not run)
```

ari_stitch

Create a video from images and audio

Description

Given a vector of paths to images (preferably .jpgs or .pngs) and a flat list of [Waves](#) of equal length this function will create an .mp4 video file where each image is shown with its corresponding audio. Take a look at the [readWave](#) function if you want to import your audio files into R. Please be sure that all images have the same dimensions.

Usage

```
ari_stitch(images, audio, output = "output.mp4")
```

Arguments

images	A vector of paths to images.
audio	A list of Waves from tuneR.
output	A path to the video file which will be created.

Details

This function uses [FFmpeg](#) which you should be sure is installed before using this function. If running `Sys.which("ffmpeg")` in your R console returns an empty string after installing FFmpeg then you should set the path to FFmpeg on your computer to an environmental variable using `Sys.setenv(ffmpeg = "path/to/ffmpeg")`. The environmental variable will always override the result of `Sys.which("ffmpeg")`.

Examples

```
## Not run:

library(tuneR)
library(purrr)

slides <- c("intro.jpeg", "equations.jpeg", "questions.jpeg")
sound <- map(c("rec1.wav", "rec2.wav", "rec3.wav"), readWave)

ari_stitch(slides, sound)

## End(Not run)
```

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