

# Exploratory Research

JUMPSTART\_ExploratoryResearch February 7, 2023

# **TEAM AIAI**

Manmeet Gill
Jacob Gil
Saba Alemayehu
Christine Li
Zachary Perumal
Brianna Duncan

### **CLIENT**

Our client Dr. James (Jay) F. Hamilton, in addition to being the director of the New Media Institute, is the current head of the Department of Entertainment and Media Studies housed in the Grady College of Journalism and Mass Communication at the University of Georgia. Dr. Hamilton's passion for the environment was sparked by an ecology class he took in high school, and the passion has since flourished into multiple research projects and public works that seek to investigate and utilize the power of democratic communications to incite dialogue on important questions as they relate to current issues such as climate change. Recognizing the entertainment industry's ability to bring attention to current issues and the potential of technology to optimize the process of content creation, Dr. Hamilton has charged our team with creating a product that will aid screenwriters in generating ideas to narrativize climate change in films and TV shows.

# **ABOUT THE PROJECT**

Our project will be a brainstorming aid used by professional film/TV writers, content developers and screenwriters from all over the world who are trying to produce films surrounding today's climate issues. The website will be a catalog of audio files that provide related content with the intention of providing a jumpstart to a user's film project. The core of the project will be using an Al speech-to-text interface in order to assist with the categorizing of the different topics covered in the audio clips.

#### INSPIRATION

Climate Change is a rising issue in today's age and many entertainment writers have been using their platforms to create projects that bring more awareness to current issues. Examples of such efforts range from non fiction documentaries such as An Inconvenient Truth and fictional yet probable stories such as The Day After Tomorrow. Narrativizing Climate Change Through Popular Culture is a CURO research article written by our client and a UGA student analyzed current films on the topic of climate change and explained how pop culture films can bridge the gap between the problem of climate change and taking action to combat it.

Currently, there are already efforts being made to help bring climate issues to the big screen. Good Energy: a Playbook for Screenwriting in the Age of Climate Change is a web page that assists writers in portraying the climate crisis in storylines. Their goal is to help facilitate the implementation of facts and authentic information while maintaining the entertainment piece. Hollywood Climate Summit: PitchFest has hosted a yearly summit advocating for change through the facilitation of climate conversation and developing the drive for climate action through storytelling. This is a place where they amplify the climate issues we face by creating a space where 20 newly established writers can share their ideas to development executives, managers, and agents at the summit. Good Pitch is a platform where they help bring together film makers and activists surrounding social issues to help with the direction of film productions. They also collect funding and bring new audiences for the films produced from their efforts.

We plan to develop a platform that implements the bridge that has been created in current efforts in this field between the film writers and climate change activists in order to promote the new climate wave in the entertainment industry.

# **CURRENT TECHNOLOGY**

In addition to the digital sources and organizations that inspired the direction of our project, there are a few technologies and platforms already on the market that will inform the functional components of our project. Our product will build upon an available framework that transcribes audio files into text so that keywords can be cross-referenced with the produced transcripts to present the user with relevant audio material. With this being the most basic function of our product, we also investigated other platforms to help us pinpoint other features our product could offer users.

The following table compares the available technologies:

	All features are free	Reputable accuracy	Ease of use	Customizable	Additional features
AssemblyAI		<b>√</b>	<b>✓</b>	<b>✓</b>	Speaker dirization, Topic Detection, Entity Detection, Automated Punctuation and Casing, Content Moderation, Sentiment Analysis, Text Summarization
Google Speech-to- Text		<b>√</b>	<b>&gt;</b>		Supports 63+ languages
	<b>√</b>			<b>√</b>	Can be trained on data, real-time transcription, asynchronous transcription
Kaldi	V			V	Can be trained on data
Wav2Letter (by Meta)	V			<b>√</b>	Good for small projects
	<b>√</b>			<b>✓</b>	Tight integration with Hugging Face and is frequently updated
Coqui	<b>√</b>			<b>√</b>	Essential inference and productionization features
Whisper (by OpenAI)	<b>√</b>			<b>√</b>	Multilingual translation

# **KEY**

Blue = Al/API

Green = Open source library

The following list summarizes available web services/platforms that could inspire the direction of our product:

# **Accessing Audio Files**

#### **Listen Notes**

Audio file search engine specific to podcasts that allows users to easily customize audio files and integrate them into their digital projects

#### **Audioburst**

Audio file search engine that performs a search across a variety of audio content types (podcasts, audiobooks, radioshows, etc.) pre-clipped with transcripts

#### **Content Collections**

#### **Climate Advocacy Labs**

A collection of relevant scientific research, case studies, current efforts to be used for any project advocating for change during the climate crisis

#### **Climate Story Labs**

A collection of year-end reports of climate issues specific to geographic regions to be used as an aid in storytelling projects

#### DesignBoom

World's first online A&D magazine that also provides a collection of side projects and previous issues to provide inspirational content to designers

#### Made By Folk

Collection of interviews with creatives curated to inspire other creatives by presenting them with innovations and insights into the world of design

# **Brainstorming Platform**

#### Miro

Virtual brainstorming aid that allows people to collaborate in creating multimedia idea boards

# Inspirational Display

#### **Word Clouds**

#### **Digital Poetry**

The intersection of written and digital arts that allows for readers to interact with poetry and experience it in a new way

Besides aiding in the ideation of our product, this investigation into current technologies and platforms has made clear to us that the nature of our project is unique, as there is no existing product that is capable of accomplishing what we are striving to do.

#### **OUR VISION**

We want creatives to use our website to get inspiration for film and TV projects that promote awareness for our changing climate and ultimately propel audiences into action. At its most basic level, it will present the user with audio files related to keywords associated with climate change, but at its most actualized level, we hope to incorporate other unique features that will further jumpstart the creative process, whether it be through a visually stimulating display or organizational tools, to produce mobilizing narratives that will ultimately mitigate the climate crisis.

# **SOURCES**

https://www.assemblyai.com/blog/the-top-free-speech-to-text-apis-and-open-source-engines/

https://www.lifewire.com/how-to-use-audio-search-engines-3482420

https://www.listennotes.com/

https://search.audioburst.com/

https://www.goodenergystories.com/playbook

https://www.hollywoodclimatesummit.com/2022-pitchfest