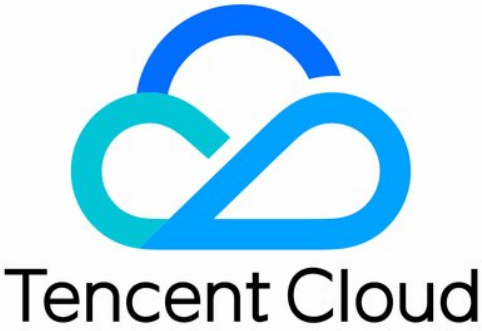
Intelligent Music Platform

Product Introduction

Product Documentation



©2013-2022 Tencent Cloud. All rights reserved.

Copyright Notice

©2013-2024 Tencent Cloud. All rights reserved.

Copyright in this document is exclusively owned by Tencent Cloud. You must not reproduce, modify, copy or distribute in any way, in whole or in part, the contents of this document without Tencent Cloud's the prior written consent.

Trademark Notice

Tencent Cloud

All trademarks associated with Tencent Cloud and its services are owned by Tencent Cloud Computing (Beijing) Company Limited and its affiliated companies. Trademarks of third parties referred to in this document are owned by their respective proprietors.

Service Statement

This document is intended to provide users with general information about Tencent Cloud's products and services only and does not form part of Tencent Cloud's terms and conditions. Tencent Cloud's products or services are subject to change. Specific products and services and the standards applicable to them are exclusively provided for in Tencent Cloud's applicable terms and conditions.

Contents

Product Introduction
- Product Overview
- Product Features
- Application Scenario

©2013-2022 Tencent Cloud. All rights reserved.

Product Introduction

Product Overview

Last updated：2024-03-04 11:51:42

The Intelligent Music Platform, developed based on the music comprehension technology developed by Tencent Media Lab, facilitates intelligent analysis, generation, and cross-modal fusion of music, providing functions including music tags, music climax, music structure analysis, music transcription, singing scoring, intelligent composition, and video soundtrack. This platform helps users to better understand, analyze, and create music, thereby exploring more musical scenarios and developing music value.

©2013-2022 Tencent Cloud. All rights reserved.

Product Features

Last updated：2024-03-04 11:52:04

Musical Understanding and Processing

Encompasses understanding, analyzing, and processing the content and structure of music, with abilities including but not limited to:
Beat Detection: Given a piece of original music, the feature can automatically pinpoint the locations or timestamps of beats.
Climax Detection: Given a piece of original music, it detects climactic events, and automatically locates all chorus sections.
Prelude Skipping: Given a piece of original music, it automatically recognizes the ending timestamp of the prelude (where the singing commences).
Source Separation: Given a piece of original music, it separates individual tracks to output four distinct soundtracks namely vocals, backing track, drums and bass.
Music Scoring: Rates the music that requires scoring against a benchmark piece, grading various aspects like intonation and rhythm.
Music Tagging: Given a piece of original music, it understands various dimensions such as intensity, mood, style, and emotion of the music, thereby automatically generating and outputting music tags for each system.
Vocal Transcription: Given a piece of original music, it isolates the vocal part, calculates the pitch and range of individual notes, and outputs a standard MIDI file.

Intelligent Music Generation

Encompasses intelligent synthesis, composition, and adaptation of a music piece's vocals or accompaniment. This specifically includes the following abilities:
Intelligent Composition: Automatically creates solo melodies or multi-track accompaniment based on a few musical notes or conditional prompts.
Vocal Synthesis: Automatically synthesizes high-fidelity vocal stem from sheet music.

Cross-Modal Fusion of Music

©2013-2022 Tencent Cloud. All rights reserved.

Integrates music deeply with cross-modal information such as video, text, and images to achieve intelligent content production. This specifically includes the following abilities:
Music Video: Inputs the original MV, automatically clips the highlights from both spatial and temporal dimensions, and matches them with the climax of the original music.
Video Background Music: Analyzes information such as scenes, objects, and events in the video, recommends matching music styles, emotions, and rhythms from the music library, and synthesizes them into background music.
Music-Dance Generation: Generates matching dance moves based on the melody, rhythm, and emotion of the music, supporting coordinate information and animated video output.

©2013-2022 Tencent Cloud. All rights reserved.

Application Scenario

Last updated：2024-03-04 11:54:58

Interactive Gaming

By leveraging the rhythm, structure, instruments, and style information derived from music element analysis, in conjunction with short videos, interactive games, and entertainment applications, the platform can help enhance content richness, upgrade operational methods, and improve the interactive experience.

Recommended Marketing

Intelligent music understanding swiftly generates characteristic tags such as music style and mood. Combined with content distribution, creative advertising recommendations, search scenarios, and so on, it enhances the efficiency of giving personalized recommendations and making precise marketing.

Background Music

Intelligent music composition can effectively address copyright issues related to music in scenarios such as offline exhibitions, experience exhibitions, supermarkets, and restaurants. Moreover, by combining a variety of intelligent music solutions, diverse interactive experience exhibitions can be designed, thereby improving the technology and experience feeling in the exhibition hall.

Music Teaching

By harnessing the intelligent understanding of beats, rhythms, and pitches, combined with real teaching scenarios, it provides teaching assistance capabilities, thereby promoting online music teaching.

©2013-2022 Tencent Cloud. All rights reserved.