Emotional recognition by voice

◆The technology of emotional recognition based on the frequency feature amount included in the voice without teacher data

◆Functionality

・Proprietary algorithm based on Panasonic's patents
  Ex. Recognition by extracting the frequency feature
    amount in the voice indicates emotion expression.
・Using the wav file which descripts voice data
・3 emotional recognition types : "Calm", "Joy" or "Angry"
・Output the result by JSON format
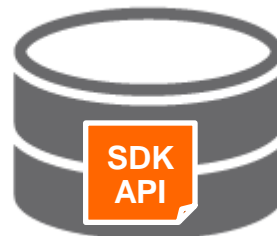・Engine types : SDK type or API Type

◆Advantages

・Unnecessary of teacher data
・Real time processing (less than 300msec)
・Simple algorithm (feasible with a low spec computer
  like as Raspberry Pi)

Calm

Joy

Anger

・Input your voice
・Converting the voice
  to wav file format

・Transmitting the wav file
  to SDK/API

SDK
API

・Emotional recognition
・By SDK/API Engine

?

・Output the result which is
  "Calm", "Joy" or "Angry"

基于语音的情绪识别

◆一种基于包含在语音中的频率特征的数量，并且不需要训练数据的情绪识别技术。

平静

高兴

愤怒

◆功能
- 基于松下专利的专有算法
  例如：通过提取包含在语音中的频率特征的数量来进行识别，标示情绪表达
- 使用描述语音数据的wav文件
- 三种情绪识别类型：**"平静"、"高兴"或者"愤怒"**
- 用JSON格式输出结果
- 引擎类型: SDK或API

◆优点
- 无需训练数据
- 实时处理 (少于300msec)
- 算法简单 (可用于配置较低的电脑，例如Raspberry Pi)
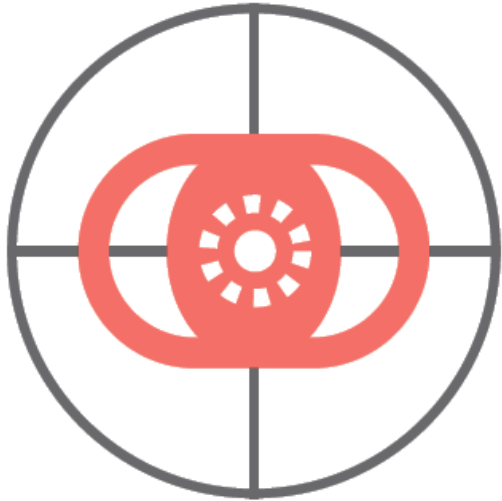
SDK
API

·输入语音
·把语音转化成wav文件格式

·把wav文件传送至SDK/API

·情绪识别
·使用SDK/API引擎

·输出结果：
"平静"、"高兴"或者
"愤怒"

IRIS authentication

◆ High security technology which is a type of biometric authentication

◆ Functionality
- ・ Proprietary technology based on Panasonic's patents
  Ex. High authentication ratio by using combining of
       a plurality of images
- ・ Authentication by comparing pre-registered IRIS data
- ・ 2 modes : Normal mode or Ambient light cutoff mode
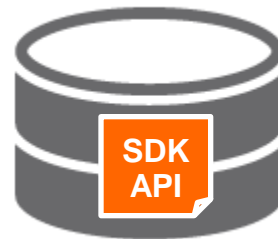- ・ Engine types : SDK type or API Type

◆ Advantages
- ・ High security(a type of biometric authentication technology)
- ・ Touchless interface
- ・ Authentication available out of doors

SDK API

OK or NG

・ Input image data including IRIS image

・ Transmitting an image, which is formed by jpg/png/jpeg, to SDK/API

・ Extracting IRIS image
・ Converting the IRIS image to IRIS code
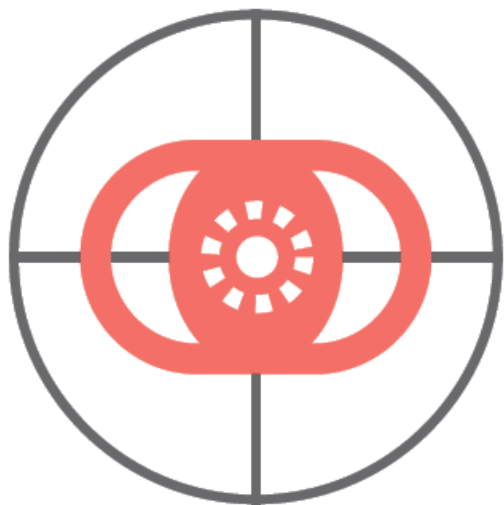・ Comparing pre-registered data
・ By SDK/API Engine

・ Output the result which is "OK" or "NG"

IRIS识别

◆一种高安全性生物特征识别技术

◆功能
- ·基于松下专利的专有技术
  例如：通过结合多个图像，实现高识别率
- · 通过比较预注册的**IRIS**数据进行识别
- · 两种模式: 标准模式或背景光关闭模式
- · 引擎类型-: **SDK或API**

◆优点
- ·高安全性(一种生物特征识别技术)
- ·无接触界面
- ·可用于户外识别

SDK
API

OK
or
NG

·输入包括**IRIS**图像
的图像数据

·把**jpg/png/jpeg**格式的图像传
送至**SDK/API**

·提取**IRIS**图像
·把**IRIS**图像转换成**IRIS**代码
·比较预注册的数据
·使用**SDK/API**引擎

·输出结果：**"OK"** 或 **"NG"**