

## Assignment 1: Functional Sound Design

Sounds are time-varying signals in the real world and, indeed, all of their meaning is related to such time variability. Therefore, it is interesting to develop sound analysis techniques that allow to grasp at least some of the distinguished features of time-varying sounds, in order to ease the tasks of understanding, comparison, modification, and resynthesis.

Familiar functional sounds are experienced every day as alerts or warnings, such as police or ambulance. This assignment requires the creation of five well designed. Finally, I have created five functional sounds to be my design.

### 1.Red Alert

I created a jitter signal for an especial situation. I was using rasp sound as a tone to warning people. Because it is a red alert signal, so I made such sound of frequency larger and the pitch higher. It is a repetitive sound. It has let people feel a little bit uncomfortable. In this case, I think this sound could be use in police station when there has something desperate event to implement. And also, it is fit on a building when there be fired. At this moment, this sound will be able to warning people to leave away the building.

### 2.Singal of low battery on mobile phone

In everyday activity, people always-using mobile phone in communion with their family, friends or business. Sometimes mobile phone was used into low electric even no powder. Many of users don't know their mobile phone has a low battery. I created this sound to remind people that their mobile phone is going switch off if they are not recharging. I have used soft tone and not very high frequency to generate it. It is goes higher and turn into lower. Seem like the battery use itself all powder to go up, and then over. User will feel worry about the mobile, and go to recharge it as soon as possible.

### 3.Sound for parking

Car parking for some people is a very hard thing. Sometimes people need help when they are parking, especially in a dark and narrow area. People will think who can give them a hand. In fact, there is no one can help them. I build up a new sound for these people who want to park in a difficult area. It is a low volume, low frequency and normal pitch. And also this is a repetitive sound as a warm warning for driver when they back in the car park.

### 4.Make people pay attention

It is more similar as warning signal. But it is hasn't high tone and pitch. A normal volume to denote a train is arriving the platform. Make a signal to passengers to let them pay attention and be careful with it. Because it is danger when the train is arriving. This particular sound also can help station staff to control people when the train is coming.

### 5.Door not closedown

Do you think if you are meeting in room without close door? Not safety? Someone can hear your meeting and obtain your meeting information? How about if the door is not close yet and there is a warning to let you know? Do you think that should be safety and comfortable? I created this sound to remind people who not really close the door. Let them know the door still opening. Sound be setting as every four times as a period. It is slowly than red alert. And the volume is set as normal. Hence, when there is a meeting, and the door was not close yet. A warning could be tweet. It is good security alerting for people.