Cacophony Mapper

Taking care of sound level of intensive care

The starting point of this graduation project is noises that nurses experience in the ICU. There is a defined medical symptom which is called “alarm fatigue” that refers to numb auditory senses, stress, low job satisfaction as a result of being exposed to excessive noise for the extended period, and it often leads to low job performances in the end. One report reveals that 65% of significant ICU incidents occur by not responding to alarms appropriately. Since the alarm is not a single source of noises in the ICU, this report first defines which sound group will be seen as a culprit of “noise fatigue” as an expanded concept of alarm fatigue in this project.

The way this graduation deals with noise in the ICU is different from the conventional approach of providing a design intervention as a solution. In this project, the focus is rather how sound stimuli and stress level of nurses can be precisely captured from the perspective of nurses and be correlated altogether so that the new system can function as an investigation tool for further design intervention to improve the sound environment in the ICU.