Functional Magnetic resonance Imaging (FMRI), is a neuroimaging technique that uses Blood Oxygen Level Dependent (BOLD) signals to detect brain activity and discover the hidden aspects of brain function. Due to the various advantages of FMRI in comparison to other imaging techniques, it has paved its way in numerous research and clinical areas, making it one of the hot topics in the field of neuroscience for a long period of time.

One of the applications for FMRI is using it to study different inaccessible fields, using virtual reality. For instance, the developed world faces major social and economic challenges associated with motor vehicle accidents, causing 1.35 million fatal, and 50 million non-fatal injuries, annually.

A major amount of vehicle accidents are due to human factors, which can be easily confronted with, if correctly detected and understood. This highlights the importance of FMRI as a technique to study the function of brain in these conditions, and therefore understand the underlying mechanisms and networks.

The aim of this laboratory is to give up-to-date services to all researches, interested in different aspects of FMRI, such as clinical neurosciences, statistical analysis, machine learning, etc., with a special look to road accident studies.